



SEQUENCE LISTING

<110> Gudas, Jean M.
Haak-Frendscho, Mary
Foord, Orit
Liang, Meina L.
Ahluwalia, Kiran
Bhakta, Sunil

<120> ANTIBODIES DIRECTED TO MONOCYTE
CHEMO-ATTRACTANT PROTEIN-1 (MCP-1) AND USES THEREOF

<130> ABXAZ.001A

<140> 10/644,277

<141> 2003-08-19

<150> 60/404,802

<151> 2002-08-19

<160> 150

<170> FastSEQ for Windows Version 4.0

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<212> DNA

<213> Homosapien

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<400> 2

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Met	Glu	Leu	Ser	Ser	Leu	Arg	Ser	Glu	Asp	Thr	Ala	Val	Tyr	Tyr	Cys
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Val	Ser	Asn	Lys	Gly	Leu	Pro	Ala	Pro	Ile	Glu	Lys	Thr	Ile	Ser	Lys
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Arg	Glu	Glu	Met	Thr	Lys	Asn	Gln	Val	Ser	Leu	Thr	Cys	Leu	Val	Lys
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Pro	Glu	Asn	Asn	Tyr	Lys	Thr	Thr	Pro	Pro	Met	Leu	Asp	Ser	Asp	Gly
385					390					395					400
Ser	Phe	Phe	Leu	Tyr	Ser	Lys	Leu	Thr	Val	Asp	Lys	Ser	Arg	Trp	Gln
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His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
435 440 445

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<213> Homosapien

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gtcttcatct tcccgccatc tgatgagcag ttgaaatctg gaactgcctc tgttgtgtgc 420
ctgctgaata acttctatcc cagagaggcc aaagtacagt ggaagggtgga taacgccctc 480
caatcgggta actcccagga gagtgtcaca gaggaggaca gcaaggacag cacctacagc 540
ctcagcagca ccctgacgct gagcaaagca gactacgaga aacacaaagt ctacgcctgc 600
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<213> Homosapien

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35 40 45
Pro Pro Lys Leu Leu Ile Tyr Trp Ala Ser Ile Arg Glu Ser Gly Val
50 55 60
Pro Asp Arg Phe Ser Ser Ser Gly Ser Glu Thr Asp Phe Thr Leu Thr
65 70 75 80
Ile Ser Ser Leu Gln Ala Glu Asp Val Ala Val Tyr Tyr Cys Gln Gln
85 90 95
Tyr Phe Ser Ser Pro Trp Thr Phe Gly Gln Gly Thr Lys Val Glu Ile
100 105 110
Lys Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp
115 120 125
Glu Gln Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn Asn
130 135 140
Phe Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn Ala Leu
145 150 155 160
Gln Ser Gly Asn Ser Gln Glu Ser Val Thr Glu Gln Asp Ser Lys Asp
165 170 175
Ser Thr Tyr Ser Leu Ser Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr
180 185 190
Glu Lys His Lys Val Tyr Ala Cys Glu Val Thr His Gln Gly Leu Ser
195 200 205

Ser Pro Val Thr Lys Ser Phe Asn Arg Gly Glu Cys
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<210> 6
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 <212> PRT
 <213> Homosapien

<400> 6
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 Ser Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Met
 35 40 45
 Gly Gly Phe Asp Pro Glu Asp Gly Glu Thr Ile Tyr Ala Gln Lys Phe
 50 55 60
 Gln Gly Arg Val Thr Met Thr Glu Asp Thr Ser Thr Asp Thr Ala Tyr
 65 70 75 80
 Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95
 Ala Thr Asn Glu Phe Trp Ser Gly Tyr Phe Asp Tyr Trp Gly Gln Gly
 100 105 110
 Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val Phe
 115 120 125
 Pro Leu Ala Pro Cys Ser Arg Ser Thr Thr Ser Pro Gly Val His Thr
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 Phe Pro Ala Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser
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<210> 8
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 <213> Homosapien

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 35 40 45
 Pro Pro Lys Leu Leu Ile Tyr Trp Ala Ser Thr Arg Glu Ser Gly Val
 50 55 60
 Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr
 65 70 75 80
 Ile Ser Ser Leu Gln Ala Glu Asp Val Ala Val Tyr Tyr Cys Gln Gln
 85 90 95
 Tyr Tyr Arg Ser Pro Trp Thr Phe Gly Gln Gly Thr Lys Val Glu Ile
 100 105 110
 Lys Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp
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 Glu Gln Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn Asn
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 Phe Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn Ala
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<210> 9
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<400> 9
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 35 40 45
 Thr Cys Ala Gly Thr Gly Ala Ala Gly Gly Thr Cys Thr Cys Cys Thr
 50 55 60
 Gly Cys Ala Ala Gly Gly Thr Thr Thr Cys Cys Gly Gly Ala Thr Ala
 65 70 75 80
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 85 90 95
 Thr Cys Cys Ala Thr Gly Cys Ala Cys Thr Gly Gly Gly Thr Gly Cys
 100 105 110
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 115 120 125
 Ala Gly Gly Gly Cys Thr Thr Gly Ala Gly Thr Gly Gly Ala Thr Gly
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Ala	Ala	Gly	Ala	Thr	Gly	Gly	Thr	Gly	Ala	Ala	Ala	Cys	Ala	Ala	Thr
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Cys	Thr	Ala	Cys	Gly	Cys	Ala	Cys	Ala	Gly	Ala	Ala	Gly	Thr	Thr	Cys
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Thr	Gly	Ala	Cys	Cys	Gly	Ala	Gly	Gly	Ala	Cys	Ala	Cys	Ala	Thr	Cys
	210					215					220				
Thr	Ala	Cys	Ala	Gly	Ala	Cys	Ala	Cys	Ala	Gly	Cys	Cys	Thr	Ala	Cys
225					230					235					240
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		275					280					285			
Gly	Cys	Ala	Ala	Cys	Ala	Ala	Ala	Cys	Gly	Ala	Thr	Thr	Thr	Thr	Thr
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Cys	Thr	Ala	Cys	Thr	Gly	Gly	Gly	Gly	Cys	Cys	Ala	Gly	Gly	Gly	Ala
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Cys	Cys	Cys	Cys	Thr	Gly	Gly	Cys	Gly	Cys	Cys	Cys	Thr	Gly	Cys	Thr
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Cys	Cys	Ala	Gly	Gly	Ala	Gly	Cys	Ala	Cys	Cys	Thr	Cys	Cys	Gly	Ala
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Gly	Gly	Cys	Thr	Gly	Cys	Cys	Thr	Gly	Gly	Thr	Cys	Ala	Ala	Gly	Gly
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Ala	Cys	Thr	Ala	Cys	Thr	Thr	Cys	Cys	Cys	Cys	Gly	Ala	Ala	Cys	Cys
	450					455					460				
Gly	Gly	Thr	Gly	Ala	Cys	Gly	Gly	Thr	Gly	Thr	Cys	Gly	Thr	Gly	Gly
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Ala	Ala	Cys	Thr	Cys	Ala	Gly	Gly	Cys	Gly	Cys	Thr	Cys	Thr	Gly	Ala
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Cys	Cys	Ala	Gly	Cys	Gly	Gly	Cys	Gly	Thr	Gly	Cys	Ala	Cys	Ala	Cys
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Cys	Thr	Thr	Cys	Cys	Cys	Ala	Gly	Cys	Thr	Gly	Thr	Cys	Cys	Thr	Ala
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Cys	Ala	Gly	Thr	Cys	Cys	Thr	Cys	Ala	Gly	Gly	Ala	Cys	Thr	Cys	Thr
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<210> 10
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 <212> PRT

<213> Homosapien

<400> 10

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Ser Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Met
      35           40           45
Gly Gly Phe Asp Pro Glu Asp Gly Glu Thr Ile Tyr Ala Gln Lys Phe
      50           55           60
Gln Gly Arg Val Thr Met Thr Glu Asp Thr Ser Thr Asp Thr Ala Tyr
      65           70           75           80
Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
      85           90           95
Ala Thr Asn Asp Phe Trp Ser Gly Tyr Tyr Asn Tyr Trp Gly Gln Gly
      100          105          110
Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val Phe
      115          120          125
Pro Leu Ala Pro Cys Ser Arg Ser Thr Ser Glu Ser Thr Ala Ala Leu
      130          135          140
Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val Ser Trp
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Gln Ser Ser Gly Leu Tyr Ser Leu Ser
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<211> 490

<212> DNA

<213> Homosapien

<400> 11

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<210> 12

<211> 163

<212> PRT

<213> Homosapien

<400> 12

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Ser Asn Asn Lys Asn Tyr Leu Val Trp Tyr Gln Gln Lys Pro Gly Gln
      35           40           45
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Pro	Pro	Lys	Leu	Leu	Ile	Tyr	Trp	Ala	Ser	Ile	Arg	Glu	Ser	Gly	Val
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65					70					75					80
Ile	Asn	Ser	Leu	Gln	Ala	Glu	Asp	Val	Ala	Val	Tyr	Tyr	Cys	Gln	Gln
			85						90					95	
Tyr	Phe	Tyr	Ser	Pro	Trp	Thr	Phe	Gly	Gln	Gly	Thr	Lys	Val	Glu	Ile
			100					105					110		
Lys	Arg	Thr	Val	Ala	Ala	Pro	Ser	Val	Phe	Ile	Phe	Pro	Pro	Ser	Asp
		115					120					125			
Glu	Gln	Leu	Lys	Ser	Gly	Thr	Ala	Ser	Val	Val	Cys	Leu	Leu	Asn	Asn
	130					135					140				
Phe	Tyr	Pro	Arg	Glu	Ala	Lys	Val	Gln	Trp	Lys	Val	Asp	Asn	Ala	Leu
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Gln	Ser	Gly													

<210> 13
 <211> 543
 <212> DNA
 <213> Homosapien

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 gcacagaagt tccaggacag agtcaccatg accgaggaca catctacaga cacagcctac 240
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 ttttgagtg gttatattga ctgctggggc cagggaaacc tggtcaccgt ctccctcagcc 360
 tccaccaag gcccacggt cttccccctg gcgccctgct ccaggagcac ctccgagagc 420
 acagcgcccc tgggctgcct ggtcaaggac tacttccccg aaccgggtgac ggtgtcgtgg 480
 aactcaggcg ctctgaccag cggcgtgcac accttcccag ctgtcctaca gtcctcagga 540
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<210> 14
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Ser	Val	Lys	Val	Ser	Cys	Lys	Val	Ser	Gly	His	Thr	Leu	Thr	Glu	Leu
		20						25				30			
Ser	Met	His	Trp	Val	Arg	Gln	Ala	Pro	Gly	Lys	Gly	Leu	Glu	Trp	Met
	35					40					45				
Gly	Gly	Phe	Asp	Pro	Glu	Asp	Asp	Glu	Thr	Ile	Tyr	Ala	Gln	Lys	Phe
	50					55				60					
Gln	Asp	Arg	Val	Thr	Met	Thr	Glu	Asp	Thr	Ser	Thr	Asp	Thr	Ala	Tyr
65					70					75					80
Met	Glu	Leu	Ser	Ser	Leu	Arg	Ser	Glu	Asp	Thr	Ala	Val	Tyr	Tyr	Cys
			85						90				95		
Ala	Thr	Asn	Asp	Phe	Trp	Ser	Gly	Tyr	Phe	Asp	Cys	Trp	Gly	Gln	Gly
			100					105					110		
Thr	Leu	Val	Thr	Val	Ser	Ser	Ala	Ser	Thr	Lys	Gly	Pro	Ser	Val	Phe
		115					120					125			

Pro	Leu	Ala	Pro	Cys	Ser	Arg	Ser	Thr	Ser	Glu	Ser	Thr	Ala	Ala	Leu
130						135					140				
Gly	Cys	Leu	Val	Lys	Asp	Tyr	Phe	Pro	Glu	Pro	Val	Thr	Val	Ser	Trp
145					150					155					160
Asn	Ser	Gly	Ala	Leu	Thr	Ser	Gly	Val	His	Thr	Phe	Pro	Ala	Val	Leu
				165					170					175	
Gln	Ser	Ser	Gly	Leu											
			180												

<210> 15
 <211> 490
 <212> DNA
 <213> Homosapien

<400> 15
 gacatcgtgc tgaccagtc tccagactcc ctggtgtgtgt gtctggggcga gagggccacc 60
 atcaactgca agtccagcca gagtggttta tatagtccca acaataagaa cttcttagtt 120
 tggtagcagc agagaccagg acagcctcct aagctgctca tttactgggc atctaccgg 180
 gaatccgggg tccctgaccg attcagtggc agcgggtctg ggacagattt cactctcacc 240
 atcagcagcc tgcaggctga agatgtggca gtttattact gtcagcaata ttatagtagt 300
 ccgtggacgt tccggccaagg gaccaagggtg gaaatcaaac gaactgtggc tgcaccatct 360
 gtcttcatct tcccgccatc tgatgagcag ttgaaatctg gaactgcctc tgttgtgtgc 420
 ctgctgaata acttctatcc cagagaggcc aaagtacagt ggaaggtgga taacgccctc 480
 caatcgggta 490

<210> 16
 <211> 163
 <212> PRT
 <213> Homosapien

<400> 16
 Asp Ile Val Leu Thr Gln Ser Pro Asp Ser Leu Ala Val Cys Leu Gly
 1 5 10 15
 Glu Arg Ala Thr Ile Asn Cys Lys Ser Ser Gln Ser Val Leu Tyr Ser
 20 25 30
 Pro Asn Asn Lys Asn Phe Leu Val Trp Tyr Gln Gln Arg Pro Gly Gln
 35 40 45
 Pro Pro Lys Leu Leu Ile Tyr Trp Ala Ser Thr Arg Glu Ser Gly Val
 50 55 60
 Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr
 65 70 75 80
 Ile Ser Ser Leu Gln Ala Glu Asp Val Ala Val Tyr Tyr Cys Gln Gln
 85 90 95
 Tyr Tyr Ser Ser Pro Trp Thr Phe Gly Gln Gly Thr Lys Val Glu Ile
 100 105 110
 Lys Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp
 115 120 125
 Glu Gln Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn Asn
 130 135 140
 Phe Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn Ala Leu
 145 150 155 160
 Gln Ser Gly

<210> 17

<211> 1335
 <212> DNA
 <213> Homosapien

<400> 17
 caggtccagc tggtagagtc tggggctgag gtgaagaagc ctggggcctc agtgaaggctc 60
 tcctgcaagg tttccggata caccctcact gaattatcca tgcactgggt gcgacagggt 120
 cctggaaaag ggcttgagtg gatgggaggt tttgatcctg aagatgggta aacaatctac 180
 gcacagaagt tccagggcag agtcacatg accgaggaca catctacaga cacagtctac 240
 atggagctga gcagcctgag atctgaggac acggccatgt attactgtgc aacacgggag 300
 ttttggaactg gttattttga cacttggggc cagggaaccc tggtcaccgt ctctcagcc 360
 tccaccaagg gcccatcggg cttccccctg gcgccctgct ccaggagcac ctccgagagc 420
 acagcggccc tgggctgcct ggtcaaggac tacttccccg aaccgggtgac ggtgtcgtgg 480
 aactcaggcg ctctgaccag cggcgtgcac accttcccag ctgtcctaca gtcctcagga 540
 ctctactccc tcagcagcgt ggtgaccgtg ccctccagca acttcggcac ccagacctac 600
 acctgcaacg tagatcacia gccagcaac accaagggtg acaagacagt tgagcgcaaa 660
 tggtgtgtcg agtgcccacc gtgcccagca ccacctgtgg caggaccgtc agtcttcctc 720
 ttcccccaa aaccgaagga caccctcatg atctcccga cccctgaggt cacgtgcgtg 780
 gtggtggacg tgagccacga agaccccgag gtccagttca actggtacgt ggacggcgtg 840
 gaggtgcata atgccaagac aaagccacgg gaggagcagt tcaacagcac gttccgtgtg 900
 gtcagcgtcc tcaccgttgt gcaccaggac tggctgaacg gcaaggagta caagtcaag 960
 gtctccaaca aaggcctccc agcccccatc gagaaaacca tctccaaaac caaagggcag 1020
 ccccgagaac cacagggtgta caccctgccc ccatcccggg aggagatgac caagaaccag 1080
 gtcagcctga cctgcctggt caaaggcttc taccacagcg acatcgccgt ggagtgaggag 1140
 agcaatgggc agccggagaa caactacaag accacacctc ccatgctgga ctccgacggc 1200
 tccttcttcc tctacagcaa gctcaccgtg gacaagagca ggtggcagca ggggaacgtc 1260
 ttctcatgct ccgtgatgca tgaggctctg cacaaccact acacgcagaa gagcctctcc 1320
 ctgtctccgg gtaaa 1335

<210> 18
 <211> 445
 <212> PRT
 <213> Homosapien

<400> 18
 Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
 1 5 10 15
 Ser Val Lys Val Ser Cys Lys Val Ser Gly Tyr Thr Leu Thr Glu Leu
 20 25 30
 Ser Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Met
 35 40 45
 Gly Gly Phe Asp Pro Glu Asp Gly Glu Thr Ile Tyr Ala Gln Lys Phe
 50 55 60
 Gln Gly Arg Val Thr Met Thr Glu Asp Thr Ser Thr Asp Thr Val Tyr
 65 70 75 80
 Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Met Tyr Tyr Cys
 85 90 95
 Ala Thr Arg Glu Phe Trp Thr Gly Tyr Phe Asp His Trp Gly Gln Gly
 100 105 110
 Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val Phe
 115 120 125
 Pro Leu Ala Pro Cys Ser Arg Ser Thr Ser Glu Ser Thr Ala Ala Leu
 130 135 140
 Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val Ser Trp
 145 150 155 160
 Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala Val Leu
 165 170 175

Gln	Ser	Ser	Gly	Leu	Tyr	Ser	Leu	Ser	Ser	Val	Val	Thr	Val	Pro	Ser
			180					185					190		
Ser	Asn	Phe	Gly	Thr	Gln	Thr	Tyr	Thr	Cys	Asn	Val	Asp	His	Lys	Pro
			195				200					205			
Ser	Asn	Thr	Lys	Val	Asp	Lys	Thr	Val	Glu	Arg	Lys	Cys	Cys	Val	Glu
			210				215					220			
Cys	Pro	Pro	Cys	Pro	Ala	Pro	Pro	Val	Ala	Gly	Pro	Ser	Val	Phe	Leu
225					230					235					240
Phe	Pro	Pro	Lys	Pro	Lys	Asp	Thr	Leu	Met	Ile	Ser	Arg	Thr	Pro	Glu
			245						250					255	
Val	Thr	Cys	Val	Val	Val	Asp	Val	Ser	His	Glu	Asp	Pro	Glu	Val	Gln
			260						265				270		
Phe	Asn	Trp	Tyr	Val	Asp	Gly	Val	Glu	Val	His	Asn	Ala	Lys	Thr	Lys
			275				280					285			
Pro	Arg	Glu	Glu	Gln	Phe	Asn	Ser	Thr	Phe	Arg	Val	Val	Ser	Val	Leu
			290				295					300			
Thr	Val	Val	His	Gln	Asp	Trp	Leu	Asn	Gly	Lys	Glu	Tyr	Lys	Cys	Lys
305					310					315					320
Val	Ser	Asn	Lys	Gly	Leu	Pro	Ala	Pro	Ile	Glu	Lys	Thr	Ile	Ser	Lys
			325						330					335	
Thr	Lys	Gly	Gln	Pro	Arg	Glu	Pro	Gln	Val	Tyr	Thr	Leu	Pro	Pro	Ser
			340						345				350		
Arg	Glu	Glu	Met	Thr	Lys	Asn	Gln	Val	Ser	Leu	Thr	Cys	Leu	Val	Lys
			355				360					365			
Gly	Phe	Tyr	Pro	Ser	Asp	Ile	Ala	Val	Glu	Trp	Glu	Ser	Asn	Gly	Gln
			370				375					380			
Pro	Glu	Asn	Asn	Tyr	Lys	Thr	Thr	Pro	Pro	Met	Leu	Asp	Ser	Asp	Gly
385					390					395					400
Ser	Phe	Phe	Leu	Tyr	Ser	Lys	Leu	Thr	Val	Asp	Lys	Ser	Arg	Trp	Gln
			405						410					415	
Gln	Gly	Asn	Val	Phe	Ser	Cys	Ser	Val	Met	His	Glu	Ala	Leu	His	Asn
			420						425				430		
His	Tyr	Thr	Gln	Lys	Ser	Leu	Ser	Leu	Ser	Pro	Gly	Lys			
			435				440					445			

<210> 19
 <211> 660
 <212> DNA
 <213> Homosapien

<400> 19
 gacatcgtga tgacccagtc tccagactcc ctggctgtgt ctctgggcga gagggccacc 60
 atcaactgca agtccagcca gagtgtttta tacagctcca acaataagaa ctacttagtt 120
 tggatcagc agaaaccagg acagcctcct aaactgctca tttactgggc atctatccgg 180
 gaatccgggg tcccggaccg attcagtggc agcgggtctg ggacagattt cactctcacc 240
 atcagcagcc tgcaggctga agatgtggca gtttattact gtcagcaata ttatagtact 300
 ccgctcactt tcggcggagg gaccaagggtg gagatcaaac gaactgtggc tgcaccatct 360
 gtcttcatct tcccgccatc tgatgagcag ttgaaatctg gaactgcctc tgttgtgtgc 420
 ctgctgaata acttctatcc cagagaggcc aaagtacagt ggaagggtgga taacgccctc 480
 caatcgggta actcccagga gagtgtcaca gagcaggaca gcaaggacag cacctacagc 540
 ctcagcagca ccctgacgct gagcaaagca gactacgaga aacacaaaagt ctacgcctgc 600
 gaagtcaccc atcagggcct gagctcgccc gtcacaaaga gcttcaacag gggagagtgt 660

<210> 20
 <211> 220

<212> PRT
 <213> Homosapien

<400> 20

Asp	Ile	Val	Met	Thr	Gln	Ser	Pro	Asp	Ser	Leu	Ala	Val	Ser	Leu	Gly
1				5					10					15	
Glu	Arg	Ala	Thr	Ile	Asn	Cys	Lys	Ser	Ser	Gln	Ser	Val	Leu	Tyr	Ser
			20					25					30		
Ser	Asn	Asn	Lys	Asn	Tyr	Leu	Val	Trp	Tyr	Gln	Gln	Lys	Pro	Gly	Gln
		35					40					45			
Pro	Pro	Lys	Leu	Leu	Ile	Tyr	Trp	Ala	Ser	Ile	Arg	Glu	Ser	Gly	Val
		50				55					60				
Pro	Asp	Arg	Phe	Ser	Gly	Ser	Gly	Ser	Gly	Thr	Asp	Phe	Thr	Leu	Thr
65					70					75					80
Ile	Ser	Ser	Leu	Gln	Ala	Glu	Asp	Val	Ala	Val	Tyr	Tyr	Cys	Gln	Gln
				85					90					95	
Tyr	Tyr	Ser	Thr	Pro	Leu	Thr	Phe	Gly	Gly	Gly	Thr	Lys	Val	Glu	Ile
			100					105					110		
Lys	Arg	Thr	Val	Ala	Ala	Pro	Ser	Val	Phe	Ile	Phe	Pro	Pro	Ser	Asp
		115					120					125			
Glu	Gln	Leu	Lys	Ser	Gly	Thr	Ala	Ser	Val	Val	Cys	Leu	Leu	Asn	Asn
		130				135					140				
Phe	Tyr	Pro	Arg	Glu	Ala	Lys	Val	Gln	Trp	Lys	Val	Asp	Asn	Ala	Leu
145					150					155					160
Gln	Ser	Gly	Asn	Ser	Gln	Glu	Ser	Val	Thr	Glu	Gln	Asp	Ser	Lys	Asp
			165						170					175	
Ser	Thr	Tyr	Ser	Leu	Ser	Ser	Thr	Leu	Thr	Leu	Ser	Lys	Ala	Asp	Tyr
			180					185					190		
Glu	Lys	His	Lys	Val	Tyr	Ala	Cys	Glu	Val	Thr	His	Gln	Gly	Leu	Ser
		195					200					205			
Ser	Pro	Val	Thr	Lys	Ser	Phe	Asn	Arg	Gly	Glu	Cys				
		210				215					220				

<210> 21
 <211> 543
 <212> DNA
 <213> Homosapien

<400> 21

caggtccagc	tggtacagtc	tggggctgag	gtgaagaagc	ctggggcctc	agtgaaggctc	60
tcctgcaagg	tttccggata	cacttttact	gaattatcca	tgcactgggt	gcgacaggct	120
cctggaaaag	ggcttgagtg	gatgggaggt	tttgatcctg	aagatgggtga	aacaagctac	180
gcacagaagt	tccggggcag	agtcaccatg	accgaggaca	catctacaga	cacagcccac	240
atggagctga	gcagcctgag	atctgaggac	acggccgtgt	attactgtgc	aaccaacgat	300
ttttggagtg	gttattttga	ctattggggc	caggggaaccc	tggtcaccgt	ctcctcagcc	360
tccaccaagg	gcccatcggt	cttccccctg	gcgccctgct	ccaggagcac	ctccgagagc	420
acagcgcccc	tgggctgcct	ggtaaggac	tacttccccg	aaccgggtgac	ggtgtcgtgg	480
aactcaggcg	ctctgaccag	cggcgtgcac	accttcccag	ctgtcctaca	gtcctcagga	540
ctt						543

<210> 22
 <211> 181
 <212> PRT
 <213> Homosapien

<400> 22

Gln	Val	Gln	Leu	Val	Gln	Ser	Gly	Ala	Glu	Val	Lys	Lys	Pro	Gly	Ala	
1				5					10					15		
Ser	Val	Lys	Val	Ser	Cys	Lys	Val	Ser	Gly	Tyr	Thr	Phe	Thr	Glu	Leu	
		20						25					30			
Ser	Met	His	Trp	Val	Arg	Gln	Ala	Pro	Gly	Lys	Gly	Leu	Glu	Trp	Met	
		35					40					45				
Gly	Gly	Phe	Asp	Pro	Glu	Asp	Gly	Glu	Thr	Ser	Tyr	Ala	Gln	Lys	Phe	
	50					55					60					
Arg	Gly	Arg	Val	Thr	Met	Thr	Glu	Asp	Thr	Ser	Thr	Asp	Thr	Ala	His	
65					70					75					80	
Met	Glu	Leu	Ser	Ser	Leu	Arg	Ser	Glu	Asp	Thr	Ala	Val	Tyr	Tyr	Cys	
			85					90					95			
Ala	Thr	Asn	Asp	Phe	Trp	Ser	Gly	Tyr	Phe	Asp	Tyr	Trp	Gly	Gln	Gly	
		100						105					110			
Thr	Leu	Val	Thr	Val	Ser	Ser	Ala	Ser	Thr	Lys	Gly	Pro	Ser	Val	Phe	
	115						120					125				
Pro	Leu	Ala	Pro	Cys	Ser	Arg	Ser	Thr	Ser	Glu	Ser	Thr	Ala	Ala	Leu	
	130					135					140					
Gly	Cys	Leu	Val	Lys	Asp	Tyr	Phe	Pro	Glu	Pro	Val	Thr	Val	Ser	Trp	
145					150					155					160	
Asn	Ser	Gly	Ala	Leu	Thr	Ser	Gly	Val	His	Thr	Phe	Pro	Ala	Val	Leu	
			165					170					175			
Gln	Ser	Ser	Gly	Leu												
			180													

<210> 23

<211> 460

<212> DNA

<213> Homosapien

<400> 23

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gacatccaga tgaccagtc tccatcttcc gtgtctgcat ctgtaggaga cagagtcacc 60
atcacttgtc gggcgagtc ggggtattgac atctacttag cctgggtatca gcagaaacca 120
gggaaagccc ctaagctcct gatcaatgct gcatccagtt tgcaaaacgg ggtccctca 180
agggtcggcg gcagtggatc tgggacagat ttcactctca ccacagcgg cctgcagcct 240
gaagattttg caacttacta ttgtcaactg acttactttt tcccgtggac gttcggccaa 300
gggaccaagg tggaaatcaa acgaactgtg gctgcaccat ctgtcttcat cttcccgcca 360
tctgatgagc agttgaaatc tggaactgcc tctgttgtgt gcctgctgaa taacttctat 420
cccagagagg ccaaagtaca gtggaaggtg gataacgccc 460

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<210> 24

<211> 153

<212> PRT

<213> Homosapien

<400> 24

Asp	Ile	Gln	Met	Thr	Gln	Ser	Pro	Ser	Ser	Val	Ser	Ala	Ser	Val	Gly	
1				5					10					15		
Asp	Arg	Val	Thr	Ile	Thr	Cys	Arg	Ala	Ser	Gln	Gly	Ile	Asp	Ile	Tyr	
		20						25					30			
Leu	Ala	Trp	Tyr	Gln	Gln	Lys	Pro	Gly	Lys	Ala	Pro	Lys	Leu	Leu	Ile	
		35				40						45				
Asn	Ala	Ala	Ser	Ser	Leu	Gln	Asn	Gly	Val	Pro	Ser	Arg	Phe	Gly	Gly	
	50					55					60					
Ser	Gly	Ser	Gly	Thr	Asp	Phe	Thr	Leu	Thr	Ile	Ser	Gly	Leu	Gln	Pro	
65					70					75				80		

Gln Ser Ser Gly Leu
180

<210> 27
<211> 459
<212> DNA
<213> Homosapien

<400> 27
gacatcgtga tgacccagtc tccagactcc ctggctgtgt ctctgggcga gagggccacc 60
atcaactgca agtccagcca gagtggttta tacagctcca acaataagaa ctacctagct 120
tggtagcaag ctgctcattt actggacata tatccgggaa tccgggggtcc ctgaccgatt 180
cagtggcagc gggctctggga cagatttcac tctcaccatc agcagcctgc aggctgaaga 240
tgtggcagtt tattactgtc aggaacatta tagtattccg tggacgttcg gccaaaggac 300
caagggtggaa atcaaacgaa ctgtggctgc accatctgtc ttcattcttc cgccatctga 360
tgagcagttg aactgcctct gttgtgtgcc tgctgaataa cttctatccc agagaggcca 420
aagtacagtg gaagggtgat aacgccctcc aatcgggta 459

<210> 28
<211> 149
<212> PRT
<213> Homosapien

<400> 28
Asp Ile Val Met Thr Gln Ser Pro Asp Ser Leu Ala Val Ser Leu Gly
1 5 10 15
Glu Arg Ala Thr Ile Asn Cys Lys Ser Ser Gln Ser Val Leu Tyr Ser
20 25 30
Ser Asn Asn Lys Asn Tyr Leu Ala Trp Tyr Leu Leu Ile Tyr Trp Thr
35 40 45
Tyr Ile Arg Glu Ser Gly Val Pro Asp Arg Phe Ser Gly Ser Gly Ser
50 55 60
Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Ala Glu Asp Val
65 70 75 80
Ala Val Tyr Tyr Cys Gln Glu His Tyr Ser Ile Pro Trp Thr Phe Gly
85 90 95
Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala Pro Ser Val
100 105 110
Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Asn Cys Leu Cys Cys Val
115 120 125
Pro Ala Glu Leu Leu Ser Gln Arg Gly Gln Ser Thr Val Glu Gly Gly
130 135 140
Arg Pro Pro Ile Gly
145

<210> 29
<211> 524
<212> DNA
<213> Homosapien

<400> 29
caggtccagc tggtagcagc tggggctgag gtgaagaagc ctggggcctc agtgaaggct 60
tcctgcaagg tttccggata caccctcact gaattatcca tgactgggt gcgacaggct 120
cctggaaaag ggcttgagtg gatgggaggt tttgatcctg aagatgatga aacaatctac 180
gcacagaagt tccagggcag agtcaccatg accgaggaca catctacaga cacggcctac 240

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atggagctga gcagcctgag atctgaggac acggccgtgt atttctgtgc aaccaacgat 300
ttttggagtg gttattttga ctgctgggac cagggaaacc tggtcaccgt ctctcagcc 360
tccaccaagg gcccatcggt ctccccctg gcgcctgtct ccaggaacac ctccgagagc 420
acagcggccc tgggctgcct ggtcaaggac tacttccccg aaccggtgac ggtgtcgtgg 480
aactcaggcg ctctgaccag cggcgtgcac accttcccag ctgt 524

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<210> 30
 <211> 174
 <212> PRT
 <213> Homosapien

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<400> 30
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
 1           5           10           15
Ser Val Lys Val Ser Cys Lys Val Ser Gly Tyr Thr Leu Thr Glu Leu
      20           25           30
Ser Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Met
      35           40           45
Gly Gly Phe Asp Pro Glu Asp Asp Glu Thr Ile Tyr Ala Gln Lys Phe
      50           55           60
Gln Gly Arg Val Thr Met Thr Glu Asp Thr Ser Thr Asp Thr Ala Tyr
      65           70           75           80
Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Phe Cys
      85           90           95
Ala Thr Asn Asp Phe Trp Ser Gly Tyr Phe Asp Cys Trp Asp Gln Gly
      100          105          110
Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val Phe
      115          120          125
Pro Leu Ala Pro Cys Ser Arg Asn Thr Ser Glu Ser Thr Ala Ala Leu
      130          135          140
Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val Ser Trp
      145          150          155          160
Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala
      165          170

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<210> 31
 <211> 490
 <212> DNA
 <213> Homosapien

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<400> 31
gacatcgtga tgaccagtc tccagactcc ctggctgcgt ctctgggcga gagggccacc 60
atcaactgca agtccagtc gagtgtttta tacaggcca acaataagaa ttatttagtt 120
tggtaccagc aaaaaccagg acagcctcct aagctgctca ttactgggc atctatccgg 180
gaatccgggg tccctgaccg attcagtggc agcgggtctg ggacagattt cactctcacc 240
atcagcagcc tgcaggctga agatgtggca gtttatttct gtcagcaata ttatagttct 300
ccgtggacgt ttggccaagg gaccaaggtg gaaatcaaac gaactgtggc tgcaccatct 360
gtcttcatct tcccgccatc tgatgagcag ttgaaatctg gaactgcctc tgttgtgtgc 420
ctgctgaata acttctatcc cagagaggcc aaagtacagt ggaaggtgga taacgccctc 480
caatcgggta 490

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<210> 32
 <211> 163
 <212> PRT
 <213> Homosapien

<400> 32

Asp Ile Val Met Thr Gln Ser Pro Asp Ser Leu Ala Ala Ser Leu Gly
1 5 10 15
Glu Arg Ala Thr Ile Asn Cys Lys Ser Ser Gln Ser Val Leu Tyr Arg
20 25 30
Ser Asn Asn Lys Asn Tyr Leu Val Trp Tyr Gln Gln Lys Pro Gly Gln
35 40 45
Pro Pro Lys Leu Leu Ile Tyr Trp Ala Ser Ile Arg Glu Ser Gly Val
50 55 60
Pro Asp Arg Phe Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr
65 70 75 80
Ile Ser Ser Leu Gln Ala Glu Asp Val Ala Val Tyr Phe Cys Gln Gln
85 90 95
Tyr Tyr Ser Ser Pro Trp Thr Phe Gly Gln Gly Thr Lys Val Glu Ile
100 105 110
Lys Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp
115 120 125
Glu Gln Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn Asn
130 135 140
Phe Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn Ala Leu
145 150 155 160
Gln Ser Gly

<210> 33

<211> 545

<212> DNA

<213> Homosapien

<400> 33

cagggtccagc tgggtacagtc tgggggctgag gtgaagaagc ctgggggcctc agtgaaggctc 60
tcctgcaagg tttccggata caccctcact gaattatcca tgcactgggt gcgacaggct 120
cctggaaaag ggcttgagtg gatgggaggt tttgatcctg aagatgggtga aacaatctac 180
gcacagaagt tccagggcag agtcaccatg accgaggaca catctacaga cacagcctac 240
atggagctga gcagcctgag atctgaggac acggccgtgt attactgtgc aacctggtat 300
agtgggatct acttagcttt tgatatctgg ggccaaggga caatgggtcac cgtctcttca 360
gcctccacca agggcccatc ggtcttcccc ctggcgccct gctccaggag cacctccgag 420
agcacagcgg ccctgggctg cctgggtcaag gactacttcc ccgaaccggg gacggtgtcg 480
tggaactcag gcgctctgac cagcggcgctg cacaccttcc cagctgtcct acagtcctca 540
ggatt 545

<210> 34

<211> 181

<212> PRT

<213> Homosapien

<400> 34

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
1 5 10 15
Ser Val Lys Val Ser Cys Lys Val Ser Gly Tyr Thr Leu Thr Glu Leu
20 25 30
Ser Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Met
35 40 45
Gly Gly Phe Asp Pro Glu Asp Gly Glu Thr Ile Tyr Ala Gln Lys Phe
50 55 60
Gln Gly Arg Val Thr Met Thr Glu Asp Thr Ser Thr Asp Thr Ala Tyr

65		70		75		80									
Met	Glu	Leu	Ser	Ser	Leu	Arg	Ser	Glu	Asp	Thr	Ala	Val	Tyr	Tyr	Cys
		85		90		95									
Ala	Thr	Trp	Tyr	Ser	Gly	Ile	Tyr	Leu	Ala	Phe	Asp	Ile	Trp	Gly	Gln
		100		105		110									
Gly	Thr	Met	Val	Thr	Val	Ser	Ser	Ala	Ser	Thr	Lys	Gly	Pro	Ser	Val
		115		120		125									
Phe	Pro	Leu	Ala	Pro	Cys	Ser	Arg	Ser	Thr	Ser	Glu	Ser	Thr	Ala	Ala
		130		135		140									
Leu	Gly	Cys	Leu	Val	Lys	Asp	Tyr	Phe	Pro	Glu	Pro	Val	Thr	Val	Ser
145				150		155									160
Trp	Asn	Ser	Gly	Ala	Leu	Thr	Ser	Gly	Val	His	Thr	Phe	Pro	Ala	Val
		165		170		175									
Leu	Gln	Ser	Ser	Gly											
		180													

<210> 35
 <211> 472
 <212> DNA
 <213> Homosapien

<400> 35
 gaaattgtgc tgactcagtc tccagacttt cagtctgtga ctccaaagga gaaagtcacc 60
 atcacctgcc gggccagtc gagcattggt agtagcttac actggtacca gcagaaacca 120
 gatcagtctc caaagctcct catcaagtat gcttcccagt ccttctcagg ggtcccctcg 180
 aggttcagtg gcagtggatc tgggacagat ttcaccctca ccatcaatag cctggaagct 240
 gaagatgctg caacgtatta ctgtcatcag agtagtagtt tacctcacac tttcggcgga 300
 gggaccaagg tggagatcaa acgaactgtg gctgcacat ctgtcttcat cttcccgcca 360
 tctgatgagc agttgaaatc tggaactgcc tctgttgtgt gcctgctgaa taacttctat 420
 cccagagagg ccaaagtaca gtggaaggtg gataacgccc tccaatcggg ta 472

<210> 36
 <211> 157
 <212> PRT
 <213> Homosapien

<400> 36
 Glu Ile Val Leu Thr Gln Ser Pro Asp Phe Gln Ser Val Thr Pro Lys
 1 5 10 15
 Glu Lys Val Thr Ile Thr Cys Arg Ala Ser Gln Ser Ile Gly Ser Ser
 20 25 30
 Leu His Trp Tyr Gln Gln Lys Pro Asp Gln Ser Pro Lys Leu Leu Ile
 35 40 45
 Lys Tyr Ala Ser Gln Ser Phe Ser Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60
 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Asn Ser Leu Glu Ala
 65 70 75 80
 Glu Asp Ala Ala Thr Tyr Tyr Cys His Gln Ser Ser Ser Leu Pro His
 85 90 95
 Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala
 100 105 110
 Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly
 115 120 125
 Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr Pro Arg Glu Ala
 130 135 140
 Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly

145

150

155

<210> 37
 <211> 1335
 <212> DNA
 <213> Homosapien

<400> 37
 cagggtccagt tgggtacagtc tggggctgag gtgaagaagc ctggggcctc agtgaaggctc 60
 tcctgcaagg tttccggata caccctcact gaattatcca tgcactgggt gcgacaggct 120
 cctggaaaag ggcttgagtg gatgggaggt tttgatcctg aagatgggtga aacaatctac 180
 gcacagaagt tccagggcag agtcagtatg accgaggaca catccacaga cacagcctac 240
 atggagctga gcagcctgag atctgaggac acggccgtgt atttctgtgc aaccaacgaa 300
 ttttgagtg gttattttga ctactggggc cagggaaccc tgggtcaccgt ctccctcagcc 360
 tccaccaagg gcccatcggt cttccccctg gcgccctgct ccaggagcac ctccgagagc 420
 acagcggccc tgggctgcct ggtcaaggac tacttccccg aaccgggtgac ggtgtcgtgg 480
 aactcaggcg ctctgaccag cggcgtgcac accttcccag ctgtcctaca gtcctcagga 540
 ctctactccc tcagcagcgt ggtgaccgtg ccttccagca acttcggcac ccagacctac 600
 acctgcaacg tagatcacia gccccagcaac accaaggtgg acaagacagt tgagcgcaaa 660
 tgttgtgtcg agtgcccacc gtgcccagca ccacctgtgg caggaccgtc agtcttcctc 720
 ttcccccaa aaccaagga caccctcatg atctcccga cccctgaggt cacgtgcgtg 780
 gtggtggacg tgagccacga agaccccag gtccagttca actggtacgt ggacggcgtg 840
 gaggtgcata atgccaaagc aaagccacgg gaggagcagt tcaacagcac gttccgtgtg 900
 gtcagcgtcc tcaccgttgt gcaccaggac tggctgaacg gcaaggagta caagtgcagg 960
 gtctccaaca aaggcctccc agcccccatc gagaaaacca tctccaaaac caaagggcag 1020
 ccccgagaac cacagggtga caccctgccc ccatcccggg aggagatgac caagaaccag 1080
 gtcagcctga cctgcctggt caaaggcttc taccacagcg acatcgccgt ggagtgggag 1140
 agcaatgggc agccggagaa caactacaag accacacctc ccatgctgga ctccgacggc 1200
 tccttcttcc tctacagcaa gctcaccgtg gacaagagca ggtggcagca ggggaacgtc 1260
 ttctcatgct ccgtgatgca tgaggctctg cacaaccact acacgcagaa gagcctctcc 1320
 ctgtctccgg gtaaa 1335

<210> 38
 <211> 445
 <212> PRT
 <213> Homosapien

<400> 38
 Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
 1 5 10 15
 Ser Val Lys Val Ser Cys Lys Val Ser Gly Tyr Thr Leu Thr Glu Leu
 20 25 30
 Ser Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Met
 35 40 45
 Gly Gly Phe Asp Pro Glu Asp Gly Glu Thr Ile Tyr Ala Gln Lys Phe
 50 55 60
 Gln Gly Arg Val Ser Met Thr Glu Asp Thr Ser Thr Asp Thr Ala Tyr
 65 70 75 80
 Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Phe Cys
 85 90 95
 Ala Thr Asn Glu Phe Trp Ser Gly Tyr Phe Asp Tyr Trp Gly Gln Gly
 100 105 110
 Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val Phe
 115 120 125
 Pro Leu Ala Pro Cys Ser Arg Ser Thr Ser Glu Ser Thr Ala Ala Leu
 130 135 140

Gly	Cys	Leu	Val	Lys	Asp	Tyr	Phe	Pro	Glu	Pro	Val	Thr	Val	Ser	Trp
145					150					155					160
Asn	Ser	Gly	Ala	Leu	Thr	Ser	Gly	Val	His	Thr	Phe	Pro	Ala	Val	Leu
				165					170						175
Gln	Ser	Ser	Gly	Leu	Tyr	Ser	Leu	Ser	Ser	Val	Val	Thr	Val	Pro	Ser
			180					185						190	
Ser	Asn	Phe	Gly	Thr	Gln	Thr	Tyr	Thr	Cys	Asn	Val	Asp	His	Lys	Pro
		195					200					205			
Ser	Asn	Thr	Lys	Val	Asp	Lys	Thr	Val	Glu	Arg	Lys	Cys	Cys	Val	Glu
	210					215					220				
Cys	Pro	Pro	Cys	Pro	Ala	Pro	Pro	Val	Ala	Gly	Pro	Ser	Val	Phe	Leu
225					230					235					240
Phe	Pro	Pro	Lys	Pro	Lys	Asp	Thr	Leu	Met	Ile	Ser	Arg	Thr	Pro	Glu
			245						250						255
Val	Thr	Cys	Val	Val	Val	Asp	Val	Ser	His	Glu	Asp	Pro	Glu	Val	Gln
			260					265						270	
Phe	Asn	Trp	Tyr	Val	Asp	Gly	Val	Glu	Val	His	Asn	Ala	Lys	Thr	Lys
		275					280					285			
Pro	Arg	Glu	Glu	Gln	Phe	Asn	Ser	Thr	Phe	Arg	Val	Val	Ser	Val	Leu
	290					295					300				
Thr	Val	Val	His	Gln	Asp	Trp	Leu	Asn	Gly	Lys	Glu	Tyr	Lys	Cys	Lys
305					310					315					320
Val	Ser	Asn	Lys	Gly	Leu	Pro	Ala	Pro	Ile	Glu	Lys	Thr	Ile	Ser	Lys
			325						330						335
Thr	Lys	Gly	Gln	Pro	Arg	Glu	Pro	Gln	Val	Tyr	Thr	Leu	Pro	Pro	Ser
			340					345					350		
Arg	Glu	Glu	Met	Thr	Lys	Asn	Gln	Val	Ser	Leu	Thr	Cys	Leu	Val	Lys
	355						360					365			
Gly	Phe	Tyr	Pro	Ser	Asp	Ile	Ala	Val	Glu	Trp	Glu	Ser	Asn	Gly	Gln
	370					375					380				
Pro	Glu	Asn	Asn	Tyr	Lys	Thr	Thr	Pro	Pro	Met	Leu	Asp	Ser	Asp	Gly
385					390					395					400
Ser	Phe	Phe	Leu	Tyr	Ser	Lys	Leu	Thr	Val	Asp	Lys	Ser	Arg	Trp	Gln
			405						410					415	
Gln	Gly	Asn	Val	Phe	Ser	Cys	Ser	Val	Met	His	Glu	Ala	Leu	His	Asn
			420					425					430		
His	Tyr	Thr	Gln	Lys	Ser	Leu	Ser	Leu	Ser	Pro	Gly	Lys			
	435						440					445			

<210> 39

<211> 660

<212> DNA

<213> Homosapien

<400> 39

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gacatcgtga tgaccagtc tccagactcc ctggctgtgt ctctgggcca gagggccacc 60
atcaactgca agtccagcca gagtgtttta tacagctcca acaataagaa ctatttagtt 120
tggtaccagc agagaccagg acagcctcct aagctgctca tttactgggc atctaccogg 180
gaatccgggg tccctgaccg attcagtggc agcgggtctg ggacagattt cactctcacc 240
atcagcagcc tgcaggctga agatgtggca gtttattact gtcagcaata tttttattct 300
ccgtggacgt tcggccaagg gaccaaggta gaaatcaaac gaactgtggc tgcaccatct 360
gtcttcatct tcccgccatc tgatgagcag ttgaaatctg gaactgcctc tgttgtgtgc 420
ctgctgaata acttctatcc cagagaggcc aaagtacagt ggaagggtga taacgccttc 480
caatcgggta actcccagga gagtgtcaca gagcaggaca gcaaggacag cacctacagc 540
ctcagcagca ccctgacgct gagcaaagca gactacgaga aacacaaagt ctacgcctgc 600
gaagtcaccc atcagggcct gagctcgccc gtcacaaaga gcttcaacag gggagagtgt 660

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<210> 40
 <211> 220
 <212> PRT
 <213> Homosapien

<400> 40
 Asp Ile Val Met Thr Gln Ser Pro Asp Ser Leu Ala Val Ser Leu Gly
 1 5 10 15
 Glu Arg Ala Thr Ile Asn Cys Lys Ser Ser Gln Ser Val Leu Tyr Ser
 20 25 30
 Ser Asn Asn Lys Asn Tyr Leu Val Trp Tyr Gln Gln Arg Pro Gly Gln
 35 40 45
 Pro Pro Lys Leu Leu Ile Tyr Trp Ala Ser Thr Arg Glu Ser Gly Val
 50 55 60
 Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr
 65 70 75 80
 Ile Ser Ser Leu Gln Ala Glu Asp Val Ala Val Tyr Tyr Cys Gln Gln
 85 90 95
 Tyr Phe Tyr Ser Pro Trp Thr Phe Gly Gln Gly Thr Lys Val Glu Ile
 100 105 110
 Lys Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp
 115 120 125
 Glu Gln Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn Asn
 130 135 140
 Phe Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn Ala Leu
 145 150 155 160
 Gln Ser Gly Asn Ser Gln Glu Ser Val Thr Glu Gln Asp Ser Lys Asp
 165 170 175
 Ser Thr Tyr Ser Leu Ser Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr
 180 185 190
 Glu Lys His Lys Val Tyr Ala Cys Glu Val Thr His Gln Gly Leu Ser
 195 200 205
 Ser Pro Val Thr Lys Ser Phe Asn Arg Gly Glu Cys
 210 215 220

<210> 41
 <211> 556
 <212> DNA
 <213> Homosapien

<400> 41
 caggtccagc tgggtacagtc tggggctgag gtgaagaagc ctggggcctc agtgaaggctc 60
 tcctgcaagg tttccggaca cattttcact gaattatcca tacactgggt gcgacaggct 120
 cctggaaaag ggctcgagtg gatgggaggt tttgatcctg aagatgggtga aacaatctac 180
 gcacagaagt tccagggcag agtcaccatg accgaggaca catctacaga cacagtctac 240
 atggagctga gcagcctgag atctgaggac acggccgtgt attactgtgc aaccaacgat 300
 ttttggagtg gttattttga ctactggggc cagggaaccc tggtcaccgt ctccctcagcc 360
 tccaccaagg gcccatcggc cttccccctg gcgccctgct ccaggagcac ctccgagagc 420
 acagcgcccc tgggctgcct ggtcaaggac tacttccccg aaccgggtgac ggtgtcgtgg 480
 aactcaggcg ctctgaccag cggcgtgcac accttcccag ctgtcctaca gtcctcagga 540
 ctctactccc tcagca 556

<210> 42
 <211> 185

<212> PRT
 <213> Homosapien

<400> 42

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Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
 1           5           10          15
Ser Val Lys Val Ser Cys Lys Val Ser Gly His Ile Phe Thr Glu Leu
      20           25           30
Ser Ile His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Met
      35           40           45
Gly Gly Phe Asp Pro Glu Asp Gly Glu Thr Ile Tyr Ala Gln Lys Phe
      50           55           60
Gln Gly Arg Val Thr Met Thr Glu Asp Thr Ser Thr Asp Thr Val Tyr
65           70           75           80
Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
      85           90           95
Ala Thr Asn Asp Phe Trp Ser Gly Tyr Phe Asp Tyr Trp Gly Gln Gly
      100          105          110
Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val Phe
      115          120          125
Pro Leu Ala Pro Cys Ser Arg Ser Thr Ser Glu Ser Thr Ala Ala Leu
      130          135          140
Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val Ser Trp
145          150          155          160
Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala Val Leu
      165          170          175
Gln Ser Ser Gly Leu Tyr Ser Leu Ser
      180          185
  
```

<210> 43
 <211> 490
 <212> DNA
 <213> Homosapien

<400> 43

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gacatcgtga tgaccagtc tccaggctcc ctggctgtgt ctctgggcca gagggccacc 60
atcaactgca agtccagcca gagtatttta ttcagggtcca acaataagaa ctatttaact 120
tggtaccagc agaaaccagg acagcctcct aaactgctca tttactgggc atctatccgg 180
gaatccgggg tccctgatcg attcagtggc agcgggtctg ggtcaaattt cactctcacc 240
atcaccagcc tgcaggctga agatgtggca atttattact gtcagcaata ttatagtagt 300
ccgtggacgt tcggccaagg gaccaagggtg gaaatcaaac gaactgtggc tgcaccatct 360
gtcttcatct tcccgccatc tgatgagcag ttgaaatctg gaactgcctc tgttgtgtgc 420
ctgctgaata acttctatcc cagagaggcc aaagtacagt ggaagggtgga taacgccctc 480
caatcgggta                                     490
  
```

<210> 44
 <211> 163
 <212> PRT
 <213> Homosapien

<400> 44

```

Asp Ile Val Met Thr Gln Ser Pro Gly Ser Leu Ala Val Ser Leu Gly
 1           5           10          15
Glu Arg Ala Thr Ile Asn Cys Lys Ser Ser Gln Ser Ile Leu Phe Arg
      20           25           30
Ser Asn Asn Lys Asn Tyr Leu Thr Trp Tyr Gln Gln Lys Pro Gly Gln
  
```


<213> Homosapien

<400> 49

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caggtccagc tggtagagtc tggggctgag gtgaagaagc ctggggcctc agtgaaggct 60
tcctgcaagg ttcccgata caccctcact gaattatcca tgcactgggt gcgacaggct 120
cctggaaaag ggcttgagtg gatgggaggt ttgatcctg aagatgatga aacaatctac 180
gcacagaagt tccagggcag agtcaccatg accgaggaca catctacaca cacagcctac 240
atggaactga gcagcctgag atctgaggac acggccgtgt attactgtgc aacacacgat 300
ttttggagtg cttattttta ctactggggc cagggaaacc tggtcaccgt ctccctcagct 360
tccaccaagg gcccatccgt cttccccctg gcgccctgct ccaggagcac ctccgagagc 420
acagccgccc tgggctgcct ggtcaaggac tacttccccg aaccggtgac ggtgtc 476
```

<210> 50

<211> 158

<212> PRT

<213> Homosapien

<400> 50

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Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
 1          5          10          15
Ser Val Lys Val Ser Cys Lys Val Ser Gly Tyr Thr Leu Thr Glu Leu
 20          25          30
Ser Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Met
 35          40          45
Gly Gly Phe Asp Pro Glu Asp Asp Glu Thr Ile Tyr Ala Gln Lys Phe
 50          55          60
Gln Gly Arg Val Thr Met Thr Glu Asp Thr Ser Thr His Thr Ala Tyr
 65          70          75          80
Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
 85          90          95
Ala Thr His Asp Phe Trp Ser Ala Tyr Phe Tyr Tyr Trp Gly Gln Gly
100          105          110
Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val Phe
115          120          125
Pro Leu Ala Pro Cys Ser Arg Ser Thr Ser Glu Ser Thr Ala Ala Leu
130          135          140
Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val
145          150          155
```

<210> 51

<211> 490

<212> DNA

<213> Homosapien

<400> 51

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gacatcgtga tgaccagtc tccagactcc ctggctgtgt ctctgggcga gagggccacc 60
atcaactgca agtccagcca gagtgtttta tacggctcca acaataagag ctacttagct 120
tggtaccagc agaaaccagg acagcctcct aagctgctca ttactgggc atctaccgg 180
gaatccgggg tccctgaccg attcagtggc agcgggtctg ggacagattt cactctcacc 240
atcagcagcc tgcaggctgc agatgtggca gtttattact gtcagcaaca ttatagtact 300
ccgtgcagtt ttggccaggg gaccaaactg gagatcaaac gaactgtggc tgcaccatct 360
gtcttcatct tcccgccatc tgatgagcag ttgaaatctg gaactgcctc tgttgtgtgc 420
ctgctgaata acttctatcc cagagaggcc aaagtacagt ggaagggtgga taacgccctc 480
caatcggtga                                     490
```

<210> 52

<211> 163
 <212> PRT
 <213> Homosapien

<400> 52
 Asp Ile Val Met Thr Gln Ser Pro Asp Ser Leu Ala Val Ser Leu Gly
 1 5 10 15
 Glu Arg Ala Thr Ile Asn Cys Lys Ser Ser Gln Ser Val Leu Tyr Gly
 20 25 30
 Ser Asn Asn Lys Ser Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln
 35 40 45
 Pro Pro Lys Leu Leu Ile Tyr Trp Ala Ser Thr Arg Glu Ser Gly Val
 50 55 60
 Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr
 65 70 75 80
 Ile Ser Ser Leu Gln Ala Ala Asp Val Ala Val Tyr Tyr Cys Gln Gln
 85 90 95
 His Tyr Ser Thr Pro Cys Ser Phe Gly Gln Gly Thr Lys Leu Glu Ile
 100 105 110
 Lys Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp
 115 120 125
 Glu Gln Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn Asn
 130 135 140
 Phe Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn Ala Leu
 145 150 155 160
 Gln Ser Gly

<210> 53
 <211> 550
 <212> DNA
 <213> Homosapien

<400> 53
 caggtgcagc tgggtgcagtc tggggctgag gtgaagaagc ctggggcctc agtgaagggtc 60
 tcttgcaagg cttctggata caccttcacc ggctactatc tgcactgggt gcgacaggcc 120
 cctggacaag ggcttgagtg gatgggatgg atcaaccctt acaatgatgg cacaaactat 180
 gcacagaagt ttcagggcag ggtcaccatg accagggaca cgtccatcag cacagcctac 240
 atggagctga gcaggctgag atctgacgac acggccgttt attactgtgc gagagatata 300
 gccgcagctg gagccgtcta ctttgactac tggggccagg gaaccctggg caccgtctcc 360
 tcagcttcca ccaagggcc atccgtcttc cccctggcgc cctgctccag gagcacctcc 420
 gagagcacag ccgccttggg ctgcctggtc aaggactact ttccccgaac cggtgacggt 480
 gtcgtggaac tcaggcgccc tgaccagcgg cgtgcacacc ttccccggtg tcttacagtc 540
 ctcaggactt 550

<210> 54
 <211> 183
 <212> PRT
 <213> Homosapien

<400> 54
 Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
 1 5 10 15
 Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Gly Tyr
 20 25 30
 Tyr Leu His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met

	115		120		125										
Thr	Ala	Ser	Val	Val	Cys	Leu	Leu	Asn	Asn	Phe	Tyr	Pro	Arg	Glu	Ala
	130				135						140				
Lys	Val	Gln	Gly	Arg	Trp	Ile	Thr								
145					150										

<210> 57
 <211> 571
 <212> DNA
 <213> Homosapien

<400> 57
 caggtccagc tggtagagtc tggggctgag gtgaagaagc ctggggcctc agtgaaggct 60
 tcctgcaagg tttccggata caccctcact gaattatcca tgcactgggt gcgacaggct 120
 cctggaaaag ggcttgagtg gatgggaggt tttgatcctg aagatgggtga aacaatctac 180
 gcacagaagt tccagggcag agtcatgatg accgaggaca catctacaga cacagccttc 240
 atggacctga gcagcctgag atctgaggac acggccgtgt attactgtgc aacagacgat 300
 atgttgaccc ctactacct ctacttcggt atggacgtct ggggccaaagg gaccacgggtc 360
 accgtctcct cagcttccac caagggccca tccgtcttcc ccctggcgcc ctgctccagg 420
 agcacctccg agagcacagc cgccttgggc tgccctggta aggactactt ccccgaccg 480
 gtgacgggtgt cgtggaactc aggcgccttg accagcggcg tgcacacctt cccggctgtc 540
 ctacagtctc caggactcta ctccctcagc a 571

<210> 58
 <211> 190
 <212> PRT
 <213> Homosapien

<400> 58
 Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
 1 5 10 15
 Ser Val Lys Val Ser Cys Lys Val Ser Gly Tyr Thr Leu Thr Glu Leu
 20 25 30
 Ser Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Met
 35 40 45
 Gly Gly Phe Asp Pro Glu Asp Gly Glu Thr Ile Tyr Ala Gln Lys Phe
 50 55 60
 Gln Gly Arg Val Met Met Thr Glu Asp Thr Ser Thr Asp Thr Ala Phe
 65 70 75 80
 Met Asp Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95
 Ala Thr Asp Asp Met Leu Thr Pro His Tyr Leu Tyr Phe Gly Met Asp
 100 105 110
 Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser Ala Ser Thr Lys
 115 120 125
 Gly Pro Ser Val Phe Pro Leu Ala Pro Cys Ser Arg Ser Thr Ser Glu
 130 135 140
 Ser Thr Ala Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro
 145 150 155 160
 Val Thr Val Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr
 165 170 175
 Phe Pro Ala Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser
 180 185 190

<210> 59

<211> 458
 <212> DNA
 <213> Homosapien

<400> 59
 gacatccaga tgacccagtc tccatcctcc ctgtctgcat ctgtaggaga cagagtcacc 60
 atcacttgcc gggcaagtca gggcattaga aatgatttag gctggtatca gcagaaacca 120
 gggaaagccc ctaagcgctt gatctatgct acatccagtt tgcaaagtgg ggtcccatca 180
 aggttcagcg gcagtggatc tgggacagaa ttcaactotca caatcagcag cctgcagcct 240
 gaagattttg caacttatta ctgtctacag cataatactt acccattcac tttcggccct 300
 gggaccaaag tggatatcaa acgaactgtg gctgcacat ctgtcttcat cttcccgcca 360
 tctgatgagc agttgaaatc tggaaactgcc tctgttgtgt gcctgctgaa taacttctat 420
 cccagagagg ccaaagtaca gtggaaggtg gataacgc 458

<210> 60
 <211> 152
 <212> PRT
 <213> Homosapien

<400> 60
 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
 1 5 10 15
 Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Asp
 20 25 30
 Leu Gly Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Arg Leu Ile
 35 40 45
 Tyr Ala Thr Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60
 Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
 65 70 75 80
 Glu Asp Phe Ala Thr Tyr Tyr Cys Leu Gln His Asn Thr Tyr Pro Phe
 85 90 95
 Thr Phe Gly Pro Gly Thr Lys Val Asp Ile Lys Arg Thr Val Ala Ala
 100 105 110
 Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly
 115 120 125
 Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr Pro Arg Glu Ala
 130 135 140
 Lys Val Gln Trp Lys Val Asp Asn
 145 150

<210> 61
 <211> 1338
 <212> DNA
 <213> Homosapien

<400> 61
 cagggtgcagc tgcaggagtc gggcccagga ctggtgaagc cttcacagac cctgtccctc 60
 acctgcactg tctcagggtg ctccatcagc agtgggtggta actactggaa ctggatccgc 120
 cagcaccagc ggaagggcct ggagtggatt gggtagatct attacagtgg aaacacctac 180
 tacaaccgct cctcaagag tcgaattacc atatcaatag acacgtctaa gaaccagttc 240
 tccctgaccc tgagctctgt gactgccgcg gacacggccg tgtattactg tgcgagagat 300
 ggtggagacg atgcttttga tatctggggc caaggagcaa tggtcaccgt ctcttcagct 360
 tccaccaagg gcccatccgt cttccccctg gcgccctgct ccaggagcac ctccgagagc 420
 acagcgcgcc tgggctgcct ggtcaaggac tacttccccg aaccgggtgac ggtgtcgtgg 480
 aactcaggcg ccttgaccag cggcgtgcac accttccccg ctgtcctaca gtccctcagga 540

```

ctctactccc tcagcagcgt ggtgaccgtg cctccagca gcttgggcac gaagacctac 600
acctgcaacg tagatcacia gccagcaac accaagggtg acaagagagt tgagtccaaa 660
tatggtcccc catgcccatc atgcccagca cctgagttcc tgggggggacc atcagtcttc 720
ctgttcccc caaaacccaa ggacactctc atgatctccc ggaccctga ggtcacgtgc 780
gtggtggtgg acgtgagcca ggaagacccc gaggtccagt tcaactggta cgtggatggc 840
gtggaggtgc ataatgcaa gacaaagccg cgggaggagc agttcaacag cacgtaccgt 900
gtggtcagcg tcttcaccgt cctgcaccag gactggctga acggcaagga gtacaagtgc 960
aaggtctcca acaaaggcct cccgtcctcc atcgagaaaa ccatctccaa agccaaaggg 1020
cagccccgag agccacaggt gtacaccctg ccccatccc aggaggagat gaccaagaac 1080
caggtcagcc tgacctgctt ggtcaaaggc ttctacccca gcgacatcgc cgtggagtgg 1140
gagagcaatg ggcagccgga gaacaactac aagaccacgc ctcccgtgct ggactccgac 1200
ggctccttct tctctacag caggctaacc gtggacaaga gcaggtggca ggaggggaat 1260
gtcttctcat gtcctgtgat gcatgaggct ctgcacaacc actacacaca gaagagcctc 1320
tccctgtctc tgggtaaa 1338

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<210> 62

<211> 446

<212> PRT

<213> Homosapien

<400> 62

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Gln Val Gln Leu Gln Glu Ser Gly Pro Gly Leu Val Lys Pro Ser Gln
1          5          10          15
Thr Leu Ser Leu Thr Cys Thr Val Ser Gly Gly Ser Ile Ser Ser Gly
20          25          30
Gly Asn Tyr Trp Asn Trp Ile Arg Gln His Pro Gly Lys Gly Leu Glu
35          40          45
Trp Ile Gly Tyr Ile Tyr Tyr Ser Gly Asn Thr Tyr Tyr Asn Pro Ser
50          55          60
Leu Lys Ser Arg Ile Thr Ile Ser Ile Asp Thr Ser Lys Asn Gln Phe
65          70          75          80
Ser Leu Thr Leu Ser Ser Val Thr Ala Ala Asp Thr Ala Val Tyr Tyr
85          90          95
Cys Ala Arg Asp Gly Gly Asp Asp Ala Phe Asp Ile Trp Gly Gln Gly
100          105          110
Thr Met Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val Phe
115          120          125
Pro Leu Ala Pro Cys Ser Arg Ser Thr Ser Glu Ser Thr Ala Ala Leu
130          135          140
Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val Ser Trp
145          150          155          160
Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala Val Leu
165          170          175
Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val Pro Ser
180          185          190
Ser Ser Leu Gly Thr Lys Thr Tyr Thr Cys Asn Val Asp His Lys Pro
195          200          205
Ser Asn Thr Lys Val Asp Lys Arg Val Glu Ser Lys Tyr Gly Pro Pro
210          215          220
Cys Pro Ser Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe
225          230          235          240
Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro
245          250          255
Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val
260          265          270
Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
275          280          285

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Lys	Pro	Arg	Glu	Glu	Gln	Phe	Asn	Ser	Thr	Tyr	Arg	Val	Val	Ser	Val
290						295					300				
Leu	Thr	Val	Leu	His	Gln	Asp	Trp	Leu	Asn	Gly	Lys	Glu	Tyr	Lys	Cys
305					310					315					320
Lys	Val	Ser	Asn	Lys	Gly	Leu	Pro	Ser	Ser	Ile	Glu	Lys	Thr	Ile	Ser
			325					330						335	
Lys	Ala	Lys	Gly	Gln	Pro	Arg	Glu	Pro	Gln	Val	Tyr	Thr	Leu	Pro	Pro
			340					345					350		
Ser	Gln	Glu	Glu	Met	Thr	Lys	Asn	Gln	Val	Ser	Leu	Thr	Cys	Leu	Val
		355					360					365			
Lys	Gly	Phe	Tyr	Pro	Ser	Asp	Ile	Ala	Val	Glu	Trp	Glu	Ser	Asn	Gly
	370					375					380				
Gln	Pro	Glu	Asn	Asn	Tyr	Lys	Thr	Thr	Pro	Pro	Val	Leu	Asp	Ser	Asp
385					390					395					400
Gly	Ser	Phe	Phe	Leu	Tyr	Ser	Arg	Leu	Thr	Val	Asp	Lys	Ser	Arg	Trp
				405					410					415	
Gln	Glu	Gly	Asn	Val	Phe	Ser	Cys	Ser	Val	Met	His	Glu	Ala	Leu	His
			420					425					430		
Asn	His	Tyr	Thr	Gln	Lys	Ser	Leu	Ser	Leu	Ser	Leu	Gly	Lys		
		435					440					445			

<210> 63
 <211> 642
 <212> DNA
 <213> Homosapien

<400> 63
 gacatccaga tgacccagtc tccatcctcc ctgtctgcat ctgtaggaga cagagtcacc 60
 atcacttgcc aggcgagtcg ggacattagc aactatttaa attgggtatca gcagaaacca 120
 gggaaagccc cttaaactcct gatctacgat gcatccaatt tggaaacagg ggtcccatca 180
 aggttcagtg gaagtggatc tgggacagat tttactttca ccatcaacag cctgcagcct 240
 gaagatatgt caacatatata ctgtcaagaa tataataatc tcccgtacag ttttggccag 300
 gggaccaagt tggagatcaa acgaactgtg gctgcacat ctgtcttcat cttcccgcca 360
 tctgatgagc agttgaaatc tggaaactgcc tctgttgtgt gcctgctgaa taacttctat 420
 cccagagagg ccaaagtaca gtggaagggtg gataacgccc tccaatcggg taactcccag 480
 gagagtgtca cagagcagga cagcaaggac agcacctaca gcctcagcag caccctgacg 540
 ctgagcaaag cagactacga gaaacacaaa gtctacgcct gcgaagtcac ccatcagggc 600
 ctgagctcgc ccgtcacaaa gagcttcaac aggggagagt gt 642

<210> 64
 <211> 214
 <212> PRT
 <213> Homosapien

<400> 64
 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
 1 5 10 15
 Asp Arg Val Thr Ile Thr Cys Gln Ala Ser Gln Asp Ile Ser Asn Tyr
 20 25 30
 Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
 35 40 45
 Tyr Asp Ala Ser Asn Leu Glu Thr Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60
 Ser Gly Ser Gly Thr Asp Phe Thr Phe Thr Ile Asn Ser Leu Gln Pro
 65 70 75 80
 Glu Asp Ile Ala Thr Tyr Tyr Cys Gln Glu Tyr Asn Asn Leu Pro Tyr

<211> 660
 <212> DNA
 <213> Homosapien

<400> 67
 gacatcgtga tgacccagtc tccagactcc ctggctgtgt ctctgggcga gagggccacc 60
 atcaactgca agtccagcca gagtgtttta tacagctcca acaataacaa ctacttagtt 120
 tgggtaccagc agaaaccagg acagcctcct aaattgctca tttactgggc atctaccggg 180
 gaattcgggg ttcttgaccg attcagtggc agcgggtctg ggacagattt cactctcacc 240
 atcagcagcc tgcaggctga agatgtggca gtttattact gtcagcaata ttatTTTTct 300
 ccgtggacgt tcggccaagg gaccaaggtg gaaatcaaac gaactgtggc tgcaccatct 360
 gtcttcatct tcccgccatc tgatgagcag ttgaaatctg gaactgcctc tgttgtgtgc 420
 ctgctgaata acttctatcc cagagaggcc aaagtacagt ggaagggtga taacgccctc 480
 caatcgggta actcccagga gagtgtcaca gagcaggaca gcaaggacag cacctacagc 540
 ctcagcagca ccctgacgct gagcaaagca gactacgaga aacacaaagt ctacgcctgc 600
 gaagtcaccc atcagggcct gagctcgccc gtcacaaaga gcttcaacag gggagagtgt 660

<210> 68
 <211> 220
 <212> PRT
 <213> Homosapien

<400> 68
 Asp Ile Val Met Thr Gln Ser Pro Asp Ser Leu Ala Val Ser Leu Gly
 1 5 10 15
 Glu Arg Ala Thr Ile Asn Cys Lys Ser Ser Gln Ser Val Leu Tyr Ser
 20 25 30
 Ser Asn Asn Asn Asn Tyr Leu Val Trp Tyr Gln Gln Lys Pro Gly Gln
 35 40 45
 Pro Pro Lys Leu Leu Ile Tyr Trp Ala Ser Thr Arg Glu Phe Gly Val
 50 55 60
 Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr
 65 70 75 80
 Ile Ser Ser Leu Gln Ala Glu Asp Val Ala Val Tyr Tyr Cys Gln Gln
 85 90 95
 Tyr Tyr Phe Ser Pro Trp Thr Phe Gly Gln Gly Thr Lys Val Glu Ile
 100 105 110
 Lys Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp
 115 120 125
 Glu Gln Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn Asn
 130 135 140
 Phe Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn Ala Leu
 145 150 155 160
 Gln Ser Gly Asn Ser Gln Glu Ser Val Thr Glu Gln Asp Ser Lys Asp
 165 170 175
 Ser Thr Tyr Ser Leu Ser Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr
 180 185 190
 Glu Lys His Lys Val Tyr Ala Cys Glu Val Thr His Gln Gly Leu Ser
 195 200 205
 Ser Pro Val Thr Lys Ser Phe Asn Arg Gly Glu Cys
 210 215 220

<210> 69
 <211> 556
 <212> DNA

<213> Homosapien

<400> 69

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caggtccagc tggtagagtc tggggctgag gtgaagaagc ctggggcctc agtgaaggct 60
tcctgcaagg ttcccgata caccctcact gatttatcca tgcactgggt gcgacaggct 120
cctggaaaag ggcttgagtg gatgggaggt tttgatcctg aagatgggtga aacaatctac 180
gcacagaagt tccagggcag agtcaccatg accgaggaca catcttcaga cacagcctac 240
atggagctga gcagcctgag atctgaggac acggccgtgt attactgtgc aacccacgaa 300
ttttggagtg gttattttga ctactggggc caggggaaccc tggtcaccgt ctccctcagct 360
tccaccaagg gcccatccgt cttccccctg gcgccctgct ccaggagcac ctccgagagc 420
acagccgccc tgggctgcct ggtcaaggac tacttccccg aaccggtgac ggtgtcgtgg 480
aactcaggcg ccctgaccag cggcgtgcac accttccccg ctgtcctaca gtccctcagga 540
ctctactccc tcagca 556
```

<210> 70

<211> 185

<212> PRT

<213> Homosapien

<400> 70

```
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
1          5          10          15
Ser Val Lys Val Ser Cys Lys Val Ser Gly Tyr Thr Leu Thr Asp Leu
20          25          30
Ser Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Met
35          40          45
Gly Gly Phe Asp Pro Glu Asp Gly Glu Thr Ile Tyr Ala Gln Lys Phe
50          55          60
Gln Gly Arg Val Thr Met Thr Glu Asp Thr Ser Ser Asp Thr Ala Tyr
65          70          75          80
Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
85          90          95
Ala Thr His Glu Phe Trp Ser Gly Tyr Phe Asp Tyr Trp Gly Gln Gly
100          105          110
Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val Phe
115          120          125
Pro Leu Ala Pro Cys Ser Arg Ser Thr Ser Glu Ser Thr Ala Ala Leu
130          135          140
Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val Ser Trp
145          150          155          160
Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala Val Leu
165          170          175
Gln Ser Ser Gly Leu Tyr Ser Leu Ser
180          185
```

<210> 71

<211> 476

<212> DNA

<213> Homosapien

<400> 71

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gacatcgtga tgaccagtc tccagactcc ctggctgtgt ctctgggcga gagggccacc 60
atcaactgca agtccagcca gagggtttta ttcagctcca acaataagag ctacttaact 120
tggtaccagc agaaaccagg acagcctcct aaattactca ttttctgggc atctatccgg 180
gaatccgggg tccctgaccg aatcagtggc agcgggtctg ggacagatct cactctcacc 240
atcagcagcc tgcaggctga agatgcggca gtttattact gtcagcaata ttatagtagt 300
```

```

ccgtggacgt tcggccaagg gaccaaggtg gaaatcaaac gaactgtggc tgcaccatct 360
gtcttcatct tcccgccatc tgatgagcag ttgaaatctg gaactgcctc tgttgtgtgc 420
ctgctgaata acttctatcc cagagaggcc aaagtacagt ggaaggtgga taacgc 476

```

```

<210> 72
<211> 158
<212> PRT
<213> Homosapien

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```

<400> 72
Asp Ile Val Met Thr Gln Ser Pro Asp Ser Leu Ala Val Ser Leu Gly
1 5 10 15
Glu Arg Ala Thr Ile Asn Cys Lys Ser Ser Gln Ser Val Leu Phe Ser
20 25 30
Ser Asn Asn Lys Ser Tyr Leu Thr Trp Tyr Gln Gln Lys Pro Gly Gln
35 40 45
Pro Pro Lys Leu Leu Ile Phe Trp Ala Ser Ile Arg Glu Ser Gly Val
50 55 60
Pro Asp Arg Ile Ser Gly Ser Gly Ser Gly Thr Asp Leu Thr Leu Thr
65 70 75 80
Ile Ser Ser Leu Gln Ala Glu Asp Ala Ala Val Tyr Tyr Cys Gln Gln
85 90 95
Tyr Tyr Ser Ser Pro Trp Thr Phe Gly Gln Gly Thr Lys Val Glu Ile
100 105 110
Lys Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp
115 120 125
Glu Gln Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn Asn
130 135 140
Phe Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn
145 150 155

```

```

<210> 73
<211> 546
<212> DNA
<213> Homosapien

```

```

<400> 73
caggtccagc tggtagagtc tggggctgag gtgaagaagc ctggggcctc agtgaaggct 60
tcctgcaagg ttcccgata caccctcagt gaattatcca tgcactgggt gcgacaggct 120
cctggaaaag ggcttgagtg gatgggaggt ttgatcctg aagatgggtga aataatccac 180
gcacagaagt tccagggcag agtcaccatg accgaggaca catctacaga cacagcctac 240
atggagctga gcagcctgag atctgaggac acggccgtgt attactgtgc aacaggcgat 300
ttttggagtg gttattacct tgactgggtg ggccagggaa ccctggtcac cgtctcctca 360
gcttccacca agggcccatc cgtcttcccc ctggcgccct gctccaggag cacctccgag 420
agcacagccg ccctgggctg cctgggtcaag gactacttcc ccgaaccggt gacggtgtcg 480
tggaactcag gcgccctgac cagcggcgtg cacaccttcc cggctgtcct acagtcctca 540
ggactt 546

```

```

<210> 74
<211> 182
<212> PRT
<213> Homosapien

```

```

<400> 74
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
1 5 10 15

```

Ser	Val	Lys	Val	Ser	Cys	Lys	Val	Ser	Gly	Tyr	Thr	Leu	Ser	Glu	Leu
		20						25					30		
Ser	Met	His	Trp	Val	Arg	Gln	Ala	Pro	Gly	Lys	Gly	Leu	Glu	Trp	Met
		35					40					45			
Gly	Gly	Phe	Asp	Pro	Glu	Asp	Gly	Glu	Ile	Ile	His	Ala	Gln	Lys	Phe
		50				55					60				
Gln	Gly	Arg	Val	Thr	Met	Thr	Glu	Asp	Thr	Ser	Thr	Asp	Thr	Ala	Tyr
65					70				75						80
Met	Glu	Leu	Ser	Ser	Leu	Arg	Ser	Glu	Asp	Thr	Ala	Val	Tyr	Tyr	Cys
			85					90					95		
Ala	Thr	Gly	Asp	Phe	Trp	Ser	Gly	Tyr	Leu	Asp	Trp	Trp	Gly	Gln	
		100					105					110			
Gly	Thr	Leu	Val	Thr	Val	Ser	Ser	Ala	Ser	Thr	Lys	Gly	Pro	Ser	Val
		115				120						125			
Phe	Pro	Leu	Ala	Pro	Cys	Ser	Arg	Ser	Thr	Ser	Glu	Ser	Thr	Ala	Ala
	130					135				140					
Leu	Gly	Cys	Leu	Val	Lys	Asp	Tyr	Phe	Pro	Glu	Pro	Val	Thr	Val	Ser
145					150				155						160
Trp	Asn	Ser	Gly	Ala	Leu	Thr	Ser	Gly	Val	His	Thr	Phe	Pro	Ala	Val
			165					170						175	
Leu	Gln	Ser	Ser	Gly	Leu										
			180												

<210> 75
 <211> 457
 <212> DNA
 <213> Homosapien

<400> 75
 gaaatagtga tgatgcagtc tccagccacc ctgtctgtgt ctccagggga aagagccacc 60
 ctctcctgca gggccagtc gagtggttaac agcaacttag cctgggtacca gcagaaacct 120
 ggccaggctc ccaggctcct catcaacggg gcatccacca gggccactgg catcccagcc 180
 aggttcagtg gcagtggggc tgggacagag ttcacctca ccatcagcag cctgcagtct 240
 gaagattttg caatttatta ctgtcagcag tataatgact ggcctacgtt cactttcggc 300
 ggagggacca aggtggagat caatcgaact gtggctgcac catctgtctt catcttcccg 360
 ccatctgatg agcagttgaa atctggaact gcctctgttg tgtgcctgct gaataacttc 420
 tatcccagag aggccaaagt acagtgggaa ggtggat 457

<210> 76
 <211> 152
 <212> PRT
 <213> Homosapien

Glu	Ile	Val	Met	Met	Gln	Ser	Pro	Ala	Thr	Leu	Ser	Val	Ser	Pro	Gly
1				5					10					15	
Glu	Arg	Ala	Thr	Leu	Ser	Cys	Arg	Ala	Ser	Gln	Ser	Val	Asn	Ser	Asn
		20						25				30			
Leu	Ala	Trp	Tyr	Gln	Gln	Lys	Pro	Gly	Gln	Ala	Pro	Arg	Leu	Leu	Ile
		35				40					45				
Asn	Gly	Ala	Ser	Thr	Arg	Ala	Thr	Gly	Ile	Pro	Ala	Arg	Phe	Ser	Gly
	50				55				60						
Ser	Gly	Ser	Gly	Thr	Glu	Phe	Thr	Leu	Thr	Ile	Ser	Ser	Leu	Gln	Ser
65				70				75					80		
Glu	Asp	Phe	Ala	Ile	Tyr	Tyr	Cys	Gln	Gln	Tyr	Asn	Asp	Trp	Pro	Thr
			85					90					95		

Phe	Thr	Phe	Gly	Gly	Gly	Thr	Lys	Val	Glu	Ile	Asn	Arg	Thr	Val	Ala
			100					105					110		
Ala	Pro	Ser	Val	Phe	Ile	Phe	Pro	Pro	Ser	Asp	Glu	Gln	Leu	Lys	Ser
		115					120					125			
Gly	Thr	Ala	Ser	Val	Val	Cys	Leu	Leu	Asn	Asn	Phe	Tyr	Pro	Arg	Glu
	130					135					140				
Ala	Lys	Val	Gln	Trp	Glu	Gly	Gly								
145						150									

<210> 77
 <211> 470
 <212> DNA
 <213> Homosapien

<400> 77
 caggtccagc tggtagagtc tggggctgag gtgaagaagc ctggggcctc agtgaaggct 60
 tcctgcaagg tttccggata caccctcact gaattatcca tgcactgggt gcgacaggct 120
 cctggaaaag ggcttgagtg gatgggaggt tttgatcctg aagatgggtga aacaatgtac 180
 gcacagaagt tccagggcag agtcaccatg accgaggaca catctacaga cacagcctac 240
 atggagctga gcagcctgag atctgaggac acggccgtgt attactgtgc aaccgacgat 300
 ttttgagtg gttattttga ctactggggc cagggaaacc tggtcaccgt ctccctcagcc 360
 tccaccaagg gcccatcggt cttccccctg gcgccctgct ccaggagcac ctccgagagc 420
 acagcgcccc tgggctgcct ggtcaaggac tacttccccg aaccggcagg 470

<210> 78
 <211> 156
 <212> PRT
 <213> Homosapien

Gln	Val	Gln	Leu	Val	Gln	Ser	Gly	Ala	Glu	Val	Lys	Lys	Pro	Gly	Ala
1				5					10					15	
Ser	Val	Lys	Val	Ser	Cys	Lys	Val	Ser	Gly	Tyr	Thr	Leu	Thr	Glu	Leu
			20					25					30		
Ser	Met	His	Trp	Val	Arg	Gln	Ala	Pro	Gly	Lys	Gly	Leu	Glu	Trp	Met
		35					40					45			
Gly	Gly	Phe	Asp	Pro	Glu	Asp	Gly	Glu	Thr	Met	Tyr	Ala	Gln	Lys	Phe
	50					55				60					
Gln	Gly	Arg	Val	Thr	Met	Thr	Glu	Asp	Thr	Ser	Thr	Asp	Thr	Ala	Tyr
65					70				75					80	
Met	Glu	Leu	Ser	Ser	Leu	Arg	Ser	Glu	Asp	Thr	Ala	Val	Tyr	Tyr	Cys
			85					90					95		
Ala	Thr	Asp	Asp	Phe	Trp	Ser	Gly	Tyr	Phe	Asp	Tyr	Trp	Gly	Gln	Gly
		100					105						110		
Thr	Leu	Val	Thr	Val	Ser	Ser	Ala	Ser	Thr	Lys	Gly	Pro	Ser	Val	Phe
	115						120					125			
Pro	Leu	Ala	Pro	Cys	Ser	Arg	Ser	Thr	Ser	Glu	Ser	Thr	Ala	Ala	Leu
	130					135					140				
Gly	Cys	Leu	Val	Lys	Asp	Tyr	Phe	Pro	Glu	Pro	Ala				
145					150					155					

<210> 79
 <211> 490
 <212> DNA
 <213> Homosapien

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<400> 79
gacatcgtga tgacccagtc tccagactcc ctggctgtgt ctctggacga gagggccacc 60
atcaactgca agtccagcca gagtggttta tacagtccca accaaaagaa ctacttagtt 120
tggtatcagc agaagccagg acagcctcct aagctgctcc ttactgggc atctatccgg 180
gaatccgggg tccctgaccg attcagtggc agcgggtctg ggacagattt cactctcacc 240
atcagcagcc tgcaggctga agatgtggca gtttattact gtcaacaaaag ttattttact 300
ccgtggacgt tcggccaagg gaccaagggtg gaaatcaaac gaactgtggc tgcaccatct 360
gtcttcatct tcccgccatc tgatgagcag ttgaaatctg gaactgcctc tgttgtgtgc 420
ctgctgaata acttctatcc cagagaggcc aaagtacagt ggaaggtgga taacgccctc 480
caatcggtga                                     490

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```

<210> 80
<211> 163
<212> PRT
<213> Homosapien

```

```

<400> 80
Asp Ile Val Met Thr Gln Ser Pro Asp Ser Leu Ala Val Ser Leu Asp
 1           5           10           15
Glu Arg Ala Thr Ile Asn Cys Lys Ser Ser Gln Ser Val Leu Tyr Ser
          20           25           30
Pro Asn Gln Lys Asn Tyr Leu Val Trp Tyr Gln Gln Lys Pro Gly Gln
          35           40           45
Pro Pro Lys Leu Leu Leu Tyr Trp Ala Ser Ile Arg Glu Ser Gly Val
          50           55           60
Pro Asp Arg Phe Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr
65           70           75           80
Ile Ser Ser Leu Gln Ala Glu Asp Val Ala Val Tyr Tyr Cys Gln Gln
          85           90           95
Ser Tyr Phe Thr Pro Trp Thr Phe Gly Gln Gly Thr Lys Val Glu Ile
          100          105          110
Lys Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp
          115          120          125
Glu Gln Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn Asn
          130          135          140
Phe Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn Ala Leu
145          150          155          160
Gln Ser Gly

```

```

<210> 81
<211> 556
<212> DNA
<213> Homosapien

```

```

<400> 81
cagggtccagc tgggtacagtc tggggctgag gtgaagaagc ctggggcctc agtgaaggtc 60
tcctgcaagg tttccggata caccctcagt gaattatcca tgcaactgggt gcgacaggct 120
cctggaaaag ggcttgagtg gatgggaggt tttgatcctg aagatgatga aacaatctac 180
gcacagaagt tccagggcag agtcaccatg accgaggaca catctacaga cacagccttc 240
atggagctga gcagcctgag atctgaggac acggccgtgt attactgtgc aaccacgat 300
ttttggagtg gttattttca ctactggggc cagggaaacc tggtcaccgt ctctcagct 360
tcaccaagg gcccatccgt ctccccctg gcgccctgct ccaggagcac ctccgagagc 420
acagccgccc tgggctgcct ggtcaaggac tacttccccg aaccggtgac ggtgtcgtgg 480
aactcaggcg ccctgaccag cggcgtgcac accttccccg ctgtcctaca gtccctcagga 540

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ctctactccc tcagca

556

<210> 82
<211> 185
<212> PRT
<213> Homosapien

<400> 82
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
1 5 10 15
Ser Val Lys Val Ser Cys Lys Val Ser Gly Tyr Thr Leu Ser Glu Leu
20 25 30
Ser Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Met
35 40 45
Gly Gly Phe Asp Pro Glu Asp Asp Glu Thr Ile Tyr Ala Gln Lys Phe
50 55 60
Gln Gly Arg Val Thr Met Thr Glu Asp Thr Ser Thr Asp Thr Ala Phe
65 70 75 80
Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95
Ala Thr His Asp Phe Trp Ser Gly Tyr Phe His Tyr Trp Gly Gln Gly
100 105 110
Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val Phe
115 120 125
Pro Leu Ala Pro Cys Ser Arg Ser Thr Ser Glu Ser Thr Ala Ala Leu
130 135 140
Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val Ser Trp
145 150 155 160
Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala Val Leu
165 170 175
Gln Ser Ser Gly Leu Tyr Ser Leu Ser
180 185

<210> 83
<211> 476
<212> DNA
<213> Homosapien

<400> 83
gacatcgtga tgaccagtc tccagactcc ctggctgtgt ctctgggcga gagggccacc 60
atcaactgca agtccagcca gagtgtttta tacagctccg acaataagag ctacttagtt 120
tggtaccagc agaaaccagg acagcctcct aaggtgctca tttactgggc atctattcgg 180
gaatccgggg tccctgaccg attcagtggc agcgggtctg ggacagattt cactctcacc 240
atcagcagcc tgcaggctga agatgtggca gtttattact gtcagcaata ttatactagt 300
ccgtggacgt tcggccaagg gaccaagggtg gaaatcaaac gaactgtggc tgcaccatct 360
gtcttcatct tcccgccatc tgatgagcag ttgaaatctg gaactgcctc tgttgtgtgc 420
ctgctgaata acttctatcc cagagaggcc aaagtacagt ggaaggtgga taacgc 476

<210> 84
<211> 158
<212> PRT
<213> Homosapien

<400> 84
Asp Ile Val Met Thr Gln Ser Pro Asp Ser Leu Ala Val Ser Leu Gly
1 5 10 15

Glu	Arg	Ala	Thr	Ile	Asn	Cys	Lys	Ser	Ser	Gln	Ser	Val	Leu	Tyr	Ser
			20					25					30		
Ser	Asp	Asn	Lys	Ser	Tyr	Leu	Val	Trp	Tyr	Gln	Gln	Lys	Pro	Gly	Gln
		35					40					45			
Pro	Pro	Lys	Val	Leu	Ile	Tyr	Trp	Ala	Ser	Ile	Arg	Glu	Ser	Gly	Val
		50				55					60				
Pro	Asp	Arg	Phe	Ser	Gly	Ser	Gly	Ser	Gly	Thr	Asp	Phe	Thr	Leu	Thr
65					70					75				80	
Ile	Ser	Ser	Leu	Gln	Ala	Glu	Asp	Val	Ala	Val	Tyr	Tyr	Cys	Gln	Gln
			85						90					95	
Tyr	Tyr	Thr	Ser	Pro	Trp	Thr	Phe	Gly	Gln	Gly	Thr	Lys	Val	Glu	Ile
			100					105					110		
Lys	Arg	Thr	Val	Ala	Ala	Pro	Ser	Val	Phe	Ile	Phe	Pro	Pro	Ser	Asp
		115					120					125			
Glu	Gln	Leu	Lys	Ser	Gly	Thr	Ala	Ser	Val	Val	Cys	Leu	Leu	Asn	Asn
	130					135					140				
Phe	Tyr	Pro	Arg	Glu	Ala	Lys	Val	Gln	Trp	Lys	Val	Asp	Asn		
145					150					155					

<210> 85
 <211> 543
 <212> DNA
 <213> Homosapien

<400> 85
 cagggtccagc tgggtacagtc tggggctgag gtgaagaagc ctggggcctc agtgaaggctc 60
 tctgtgaagg ttcccgata caccctcact gaattatcca tgcactgggt gcgacaggct 120
 cctggaaaag ggcttgagtg gatgggaggt ttgatcctg aagatgggtga aacaatctac 180
 gcacagaagt tccagggcag agtcaccatg accgaggaca catctacaga cacagcctac 240
 atggagctga gcagcctgag atctgaggac acggccgtgt attactgtgc aatccacgag 300
 ttttgagtg gttattttga ctactggggc cagggaaacc tggtcaccgt ctcttcagct 360
 tccaccaagg gcccatccgt ctccccctg gcgccctgct ccaggagcac ctccgagagc 420
 acagccgcc tgggctgcct ggtcaaggac tacttccccg aaccggtgac ggtgtcgtgg 480
 aactcaggcg cctgaccag cggcgtgcac accttccccg ctgtcctaca gtcctcagga 540
 ctt 543

<210> 86
 <211> 181
 <212> PRT
 <213> Homosapien

Gln	Val	Gln	Leu	Val	Gln	Ser	Gly	Ala	Glu	Val	Lys	Lys	Pro	Gly	Ala
1				5					10					15	
Ser	Val	Lys	Val	Ser	Cys	Lys	Val	Ser	Gly	Tyr	Thr	Leu	Thr	Glu	Leu
			20					25					30		
Ser	Met	His	Trp	Val	Arg	Gln	Ala	Pro	Gly	Lys	Gly	Leu	Glu	Trp	Met
		35					40					45			
Gly	Gly	Phe	Asp	Pro	Glu	Asp	Gly	Glu	Thr	Ile	Tyr	Ala	Gln	Lys	Phe
	50					55				60					
Gln	Gly	Arg	Val	Thr	Met	Thr	Glu	Asp	Thr	Ser	Thr	Asp	Thr	Ala	Tyr
65					70				75					80	
Met	Glu	Leu	Ser	Ser	Leu	Arg	Ser	Glu	Asp	Thr	Ala	Val	Tyr	Tyr	Cys
			85					90					95		
Ala	Ile	His	Glu	Phe	Trp	Ser	Gly	Tyr	Phe	Asp	Tyr	Trp	Gly	Gln	Gly
			100				105						110		

Thr	Leu	Val	Thr	Val	Ser	Ser	Ala	Ser	Thr	Lys	Gly	Pro	Ser	Val	Phe
	115						120					125			
Pro	Leu	Ala	Pro	Cys	Ser	Arg	Ser	Thr	Ser	Glu	Ser	Thr	Ala	Ala	Leu
	130					135					140				
Gly	Cys	Leu	Val	Lys	Asp	Tyr	Phe	Pro	Glu	Pro	Val	Thr	Val	Ser	Trp
145				150					155					160	
Asn	Ser	Gly	Ala	Leu	Thr	Ser	Gly	Val	His	Thr	Phe	Pro	Ala	Val	Leu
			165					170						175	
Gln	Ser	Ser	Gly	Leu											
			180												

<210> 87
 <211> 477
 <212> DNA
 <213> Homosapien

<400> 87
 gacatcgtga tgaccagtc tccagactcc ctggctgtgt ctctgggcga gagggccacc 60
 atcaactgca agtccagcct gagtggttta tacagctcca acaataagaa ctatttagtt 120
 tggtagcttc agaaaccagg acagcctcct aagttgtctca ttactgggc atctaccgg 180
 gaatccgggg tccctgaccg attcagtggc agcgggtctg ggacagattt cactctcacc 240
 atcagcagcc tgcaggccga agatgtggca gtttattact gtcagcaata ttatagttct 300
 ccgtggacgt tccggccaagg gaccaagggtg gaaatcaaac gaactgtggc tgcaccatct 360
 gtcttcatct tcccgccatc tgatgagcag ttgaaatctg gaactgcctc tgttgtgtgc 420
 ctgctgaata acttctatcc cagagaggcc aaagtacagt ggaaggtgga taacgcc 477

<210> 88
 <211> 159
 <212> PRT
 <213> Homosapien

Asp	Ile	Val	Met	Thr	Gln	Ser	Pro	Asp	Ser	Leu	Ala	Val	Ser	Leu	Gly
1				5				10					15		
Glu	Arg	Ala	Thr	Ile	Asn	Cys	Lys	Ser	Ser	Leu	Ser	Val	Leu	Tyr	Ser
			20				25					30			
Ser	Asn	Asn	Lys	Asn	Tyr	Leu	Val	Trp	Tyr	Leu	Gln	Lys	Pro	Gly	Gln
		35				40					45				
Pro	Pro	Lys	Leu	Leu	Ile	Tyr	Trp	Ala	Ser	Thr	Arg	Glu	Ser	Gly	Val
	50				55					60					
Pro	Asp	Arg	Phe	Ser	Gly	Ser	Gly	Ser	Gly	Thr	Asp	Phe	Thr	Leu	Thr
65				70				75						80	
Ile	Ser	Ser	Leu	Gln	Ala	Glu	Asp	Val	Ala	Val	Tyr	Tyr	Cys	Gln	Gln
			85					90					95		
Tyr	Tyr	Ser	Ser	Pro	Trp	Thr	Phe	Gly	Gln	Gly	Thr	Lys	Val	Glu	Ile
			100				105					110			
Lys	Arg	Thr	Val	Ala	Ala	Pro	Ser	Val	Phe	Ile	Phe	Pro	Pro	Ser	Asp
		115				120					125				
Glu	Gln	Leu	Lys	Ser	Gly	Thr	Ala	Ser	Val	Val	Cys	Leu	Leu	Asn	Asn
	130				135					140					
Phe	Tyr	Pro	Arg	Glu	Ala	Lys	Val	Gln	Trp	Lys	Val	Asp	Asn	Ala	
145				150				155							

<210> 89
 <211> 1335

<212> DNA

<213> Homosapien

<400> 89

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caggtccagc tggtagagtc tggggctgag gtgaagaagc ctgggggcctc agtgaaggctc 60
tcctgcaagg ttcccgata caccctcact gaattatcca tgcactgggt gcgacagact 120
cctggaaaag ggcttgagtg gatgggaggt tttgatcctg aagatgggtga aacaatctac 180
gcacagaagt tccaggacag agtcaccatg accgaggaca catctacaga cacagcctac 240
atggaactga gcagcctgag atctgaggac acggccgtgt attactgtgc aacaaacgat 300
ttttggactg gttattatga ctactggggc cagggaaccc tggtcaccgt ctccctcagcc 360
tccaccaagg gcccatcggt cttccccctg gcgcctgtct ccaggagcac ctccgagagc 420
acagcggccc tgggctgcct ggtcaaggac tacttccccg aaccggtgac ggtgtcgtgg 480
aactcaggcg ctctgaccag cggcgtgcac accttcccag ctgtcctaca gtcctcagga 540
ctctactccc tcagcagcgt ggtgaccgtg ccttccagca acttcggcac ccagacctac 600
acctgcaacg tagatcacaa gcccagcaac accaagggtgg acaagacagt tgagcgcaaa 660
tggtgtgtcg agtgcccacc gtgcccagca ccacctgtgg caggaccgtc agtcttcctc 720
ttcccccaa aacccaagga caccctcatg atctcccga cccctgaggt cacgtgcgtg 780
gtggtggagc tgagccacga agaccccgag gtccagttca actggtacgt ggacggcgtg 840
gaggtgcata atgccaagac aaagccacgg gaggagcagt tcaacagcac gttccgtgtg 900
gtcagcgtcc tcaccgttgt gcaccaggac tggctgaacg gcaaggagta caagtgaag 960
gtctccaaca aaggcctccc agcccccatc gagaaaacca tctccaaaac caaagggcag 1020
ccccgagaac cacaggtgta caccctgccc ccatcccggg aggagatgac caagaaccag 1080
gtcagcctga cctgcctggt caaaggcttc taccocagcg acatcgccgt ggagtgggag 1140
agcaatgggc agccggagaa caactacaag accacacctc ccatgctgga ctccgacggc 1200
tccttcttcc tctacagcaa gctcaccgtg gacaagagca ggtggcagca ggggaacgtc 1260
ttctcatgct ccgtgatgca tgaggctctg cacaaccact acacgcagaa gagcctctcc 1320
ctgtctccgg gtaaa 1335
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<210> 90

<211> 445

<212> PRT

<213> Homosapien

<400> 90

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Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
 1          5          10          15
Ser Val Lys Val Ser Cys Lys Val Ser Gly Tyr Thr Leu Thr Glu Leu
 20          25          30
Ser Met His Trp Val Arg Gln Thr Pro Gly Lys Gly Leu Glu Trp Met
 35          40          45
Gly Gly Phe Asp Pro Glu Asp Gly Glu Thr Ile Tyr Ala Gln Lys Phe
 50          55          60
Gln Asp Arg Val Thr Met Thr Glu Asp Thr Ser Thr Asp Thr Ala Tyr
 65          70          75          80
Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
 85          90          95
Ala Thr Asn Asp Phe Trp Thr Gly Tyr Tyr Asp Tyr Trp Gly Gln Gly
 100          105          110
Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val Phe
 115          120          125
Pro Leu Ala Pro Cys Ser Arg Ser Thr Ser Glu Ser Thr Ala Ala Leu
 130          135          140
Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val Ser Trp
 145          150          155          160
Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala Val Leu
 165          170          175
Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val Pro Ser
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<213> Homosapien

<400> 92

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Asp Ile Val Met Thr Gln Ser Pro Asp Ser Leu Ala Val Ser Leu Gly
 1           5           10           15
Glu Arg Ala Thr Ile Asn Cys Lys Ser Ser Gln Ser Val Leu Tyr Ser
 20           25           30
Ser Asn Asn Lys Asn Tyr Leu Val Trp Tyr Gln Gln Lys Pro Gly Gln
 35           40           45
Pro Pro Lys Thr Leu Ile Tyr Trp Ala Ser Thr Arg Glu Ser Gly Val
 50           55           60
Pro Asp Arg Phe Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr
 65           70           75           80
Ile Ser Ser Leu Gln Ala Glu Asp Val Gly Val Tyr Tyr Cys Gln Gln
 85           90           95
Tyr Tyr Thr Ser Pro Trp Thr Phe Gly Gln Gly Thr Lys Val Glu Ile
 100          105          110
Lys Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp
 115          120          125
Glu Gln Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn Asn
 130          135          140
Phe Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn Ala Leu
 145          150          155          160
Gln Ser Gly Asn Ser Gln Glu Ser Val Thr Glu Gln Asp Ser Lys Asp
 165          170          175
Ser Thr Tyr Ser Leu Ser Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr
 180          185          190
Glu Lys His Lys Val Tyr Ala Cys Glu Val Thr His Gln Gly Leu Ser
 195          200          205
Ser Pro Val Thr Lys Ser Phe Asn Arg Gly Glu Cys
 210          215          220
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<210> 93

<211> 560

<212> DNA

<213> Homosapien

<400> 93

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cagggtgcagc tgcaggagtc gggcccagga ctggtgaagc cgtcacagac cctgtccctc 60
acctgcactg tctctggtgg ctccatcagc agtgggtggtt actactggag ctggatccgc 120
cagcaccagc ggaagggcct ggagtggatt gggtagatct attacagtgg gagcacctac 180
tacaaccgtt ccctcaagag tcgagttatc atatcagtag acacgtctaa gaaccagttc 240
tccctgaagc tgacctctgt gactgccgcg gacacggccg tgtattactg tgcgagatca 300
tatagcagct cgtccccact ggttcgaccc ctggggccag ggaaccctgg tcaccgtctc 360
ctcagcttcc accaagggcc catccgtctt cccctggcg cctgctcca ggagcacctc 420
cgagagcaca gccgccctgg gctgcctggt caaggactac ttccccgaac cggtagcggg 480
gtcgtggaac tcaggcgccc tgaccagcgg cgtgcacacc ttcccggtg tcctacagtc 540
ctcaggactc tactccctca                                     560
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<210> 94

<211> 186

<212> PRT

<213> Homosapien

<400> 94

Gln Val Gln Leu Gln Glu Ser Gly Pro Gly Leu Val Lys Pro Ser Gln

1				5					10					15				
Thr	Leu	Ser	Leu	Thr	Cys	Thr	Val	Ser	Gly	Gly	Ser	Ile	Ser	Ser	Gly			
			20					25					30					
Gly	Tyr	Tyr	Trp	Ser	Trp	Ile	Arg	Gln	His	Pro	Gly	Lys	Gly	Leu	Glu			
		35				40						45						
Trp	Ile	Gly	Tyr	Ile	Tyr	Tyr	Ser	Gly	Ser	Thr	Tyr	Tyr	Asn	Pro	Ser			
	50				55						60							
Leu	Lys	Ser	Arg	Val	Ile	Ile	Ser	Val	Asp	Thr	Ser	Lys	Asn	Gln	Phe			
65				70					75						80			
Ser	Leu	Lys	Leu	Thr	Ser	Val	Thr	Ala	Ala	Asp	Thr	Ala	Val	Tyr	Tyr			
			85					90						95				
Cys	Ala	Arg	Ser	Tyr	Ser	Ser	Ser	Ser	Pro	Leu	Val	Arg	Pro	Leu	Gly			
			100					105					110					
Pro	Gly	Asn	Pro	Gly	His	Arg	Leu	Leu	Ser	Phe	His	Gln	Gly	Pro	Ile			
		115					120					125						
Arg	Leu	Pro	Pro	Gly	Ala	Leu	Leu	Gln	Glu	His	Leu	Arg	Glu	His	Ser			
	130					135					140							
Arg	Pro	Gly	Leu	Pro	Gly	Gln	Gly	Leu	Leu	Pro	Arg	Thr	Gly	Asp	Gly			
145					150					155					160			
Val	Val	Glu	Leu	Arg	Arg	Pro	Asp	Gln	Arg	Arg	Ala	His	Leu	Pro	Gly			
			165					170						175				
Cys	Pro	Thr	Val	Leu	Arg	Thr	Leu	Leu	Pro									
			180					185										

<210> 95
 <211> 458
 <212> DNA
 <213> Homosapien

<400> 95
 gacatccaga tgaccagtc tccatcctcc ctgtctgcat ctgtaggaga cagagtcacc 60
 atcacttgcc gggcaagtca gggcattaga aatgatttag gctggtatca gcagaaacca 120
 gggaaagccc ctaagcgctt gatctatgct gcatccagtt tgcaaagtgg ggtcccatca 180
 aggttcagcg gcagtggatc tgggacagaa ttcactctca caatcagcag cctgcagcct 240
 gaagattttg caacttatta ctgtctacag cataatagtt acccattcac tttcggcctt 300
 gggaccaaag tggatatcaa acgaactgtg gctgcaccat ctgtcttcat cttcccgcca 360
 tctgatgagc agttgaaatc tgggaactgcc tctgttgtgt gcctgctgaa taacttctat 420
 cccagagagg ccaaagtaca gtggaagggtg gataacgc 458

<210> 96
 <211> 152
 <212> PRT
 <213> Homosapien

<400> 96
 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
 1 5 10 15
 Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Asp
 20 25 30
 Leu Gly Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Arg Leu Ile
 35 40 45
 Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60
 Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
 65 70 75 80
 Glu Asp Phe Ala Thr Tyr Tyr Cys Leu Gln His Asn Ser Tyr Pro Phe

				85					90					95					
Thr	Phe	Gly	Pro	Gly	Thr	Lys	Val	Asp	Ile	Lys	Arg	Thr	Val	Ala	Ala				
			100					105					110						
Pro	Ser	Val	Phe	Ile	Phe	Pro	Pro	Ser	Asp	Glu	Gln	Leu	Lys	Ser	Gly				
		115					120					125							
Thr	Ala	Ser	Val	Val	Cys	Leu	Leu	Asn	Asn	Phe	Tyr	Pro	Arg	Glu	Ala				
	130					135					140								
Lys	Val	Gln	Trp	Lys	Val	Asp	Asn												
145					150														

<210> 97
 <211> 559
 <212> DNA
 <213> Homosapien

<400> 97
 cagggtccagc tggtagagtc tggggctgag gtgaagaagc ctggggcctc agtgaaggctc 60
 tcctgcaagg tttccggata caccctcact gaattatcca tgcactgggt gcgacaggct 120
 cctggaaaag ggcttgagtg gatgggaggt tttgatcctg aagatgggtga aacaatctac 180
 gcacagaagt tccagggcag agtcaccatg accgaggaca catctacaga cacagcctac 240
 atggagctga gcagcctgag atctgaggac acggccgtgt attactgtgc aacagatcgc 300
 gagtttttga gtggttatatt ctaccactgg ggccaggga ccttggtcac cgtctcctca 360
 gcctccacca agggcccatc ggtcttcccc ctggcgccct gctccaggag cacctccgag 420
 agcacagcgg ccctgggctg cctgggtcaag gactacttcc ccgaaccggt gacggtgtcg 480
 tggaactcag gcgctctgac cagcggcggtg cacaccttcc cagctgtcct acagtcctca 540
 ggactctact ccctcagca 559

<210> 98
 <211> 186
 <212> PRT
 <213> Homosapien

<400> 98
 Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
 1 5 10 15
 Ser Val Lys Val Ser Cys Lys Val Ser Gly Tyr Thr Leu Thr Glu Leu
 20 25 30
 Ser Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Met
 35 40 45
 Gly Gly Phe Asp Pro Glu Asp Gly Glu Thr Ile Tyr Ala Gln Lys Phe
 50 55 60
 Gln Gly Arg Val Thr Met Thr Glu Asp Thr Ser Thr Asp Thr Ala Tyr
 65 70 75 80
 Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95
 Ala Thr Asp Arg Glu Phe Trp Ser Gly Tyr Phe Tyr His Trp Gly Gln
 100 105 110
 Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val
 115 120 125
 Phe Pro Leu Ala Pro Cys Ser Arg Ser Thr Ser Glu Ser Thr Ala Ala
 130 135 140
 Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val Ser
 145 150 155 160
 Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala Val
 165 170 175
 Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser

180

185

<210> 99
 <211> 491
 <212> DNA
 <213> Homosapien

<400> 99
 gacatcgtga tgacccagtc tccagactcc ctggctgtgt ctctgggcga gagggccacc 60
 atcaactgca agtccagcca gagtgtttta tacagctcca acaatgagaa cttcttagct 120
 tgggtaccagc agaaaccagg acagcctcct aaactgctca ttactgggc atctaccgg 180
 gaatccgggg tcccagaccg cttcagtggc agcgggtctg ggacagattt cactctcacc 240
 atcagcagcc tgcaggctga agatgtggca gtttattact gtcagcaata ttataatagt 300
 ccgtggacgt tccggccaagg gaccaagggtg gaaatcaaac gaactgtggc tgcaccatct 360
 gtcttcatct tcccgccatc tgatgagcag ttgaaatctg gaactgcctc tgttgtgtgc 420
 ctgctgaata acttctatcc cagagaggcc aaagtacagt ggaaggtgga taacgcctcc 480
 ccaatcgggt a 491

<210> 100
 <211> 163
 <212> PRT
 <213> Homosapien

<400> 100
 Asp Ile Val Met Thr Gln Ser Pro Asp Ser Leu Ala Val Ser Leu Gly
 1 5 10 15
 Glu Arg Ala Thr Ile Asn Cys Lys Ser Ser Gln Ser Val Leu Tyr Ser
 20 25 30
 Ser Asn Asn Glu Asn Phe Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln
 35 40 45
 Pro Pro Lys Leu Leu Ile Tyr Trp Ala Ser Thr Arg Glu Ser Gly Val
 50 55 60
 Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr
 65 70 75 80
 Ile Ser Ser Leu Gln Ala Glu Asp Val Ala Val Tyr Tyr Cys Gln Gln
 85 90 95
 Tyr Tyr Asn Ser Pro Trp Thr Phe Gly Gln Gly Thr Lys Val Glu Ile
 100 105 110
 Lys Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp
 115 120 125
 Glu Gln Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn Asn
 130 135 140
 Phe Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn Ala Ser
 145 150 155 160
 Pro Ile Gly

<210> 101
 <211> 543
 <212> DNA
 <213> Homosapien

<400> 101
 caggtccagc tgggtacagtc tggggctgag gtgaagaagc ctggggcctc agtgaaggct 60
 tcctgcaagg tttccggata caccctcact gaattatcca tgcaactgggt gcgacaggct 120


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cctggaaaag ggcttgagtg gatgggaggt tttgatcctg aagatgggtga aacaatctac 180
gcacagaagt tccagggcag agtcaccatg accgaggaca catctacaga cacagcctac 240
atggagctga gcagcctgag atctgaggac acggccgtgt attactgtgc aacggacgat 300
ttttggagtg gttattttga ctactggggc cagggaaacc tggtcaccgt ctccctcagcc 360
tccaccaagg gcccatcggt cttccccctg gcgccctgct ccaggagcac ctccgagagc 420
acagcggccc tgggctgcct ggtcaaggac tacttccccg aaccgggtgac ggtgtcgtgg 480
aactcaggcg ctctgaccag cggcgtgcac accttcccag ctgtcctaca gtcctcagga 540
ctt
543

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<210> 102
 <211> 181
 <212> PRT
 <213> Homosapien

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<400> 102
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
 1          5          10          15
Ser Val Lys Val Ser Cys Lys Val Ser Gly Tyr Thr Leu Thr Glu Leu
 20          25          30
Ser Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Met
 35          40          45
Gly Gly Phe Asp Pro Glu Asp Gly Glu Thr Ile Tyr Ala Gln Lys Phe
 50          55          60
Gln Gly Arg Val Thr Met Thr Glu Asp Thr Ser Thr Asp Thr Ala Tyr
 65          70          75          80
Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
 85          90          95
Ala Thr Asp Asp Phe Trp Ser Gly Tyr Phe Asp Tyr Trp Gly Gln Gly
100          105          110
Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val Phe
115          120          125
Pro Leu Ala Pro Cys Ser Arg Ser Thr Ser Glu Ser Thr Ala Ala Leu
130          135          140
Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val Ser Trp
145          150          155          160
Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala Val Leu
165          170          175
Gln Ser Ser Gly Leu
180

```

<210> 103
 <211> 491
 <212> DNA
 <213> Homosapien

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<400> 103
gacatcgtga tgaccagtc tccagactcc ctggctgtgt ctctgggcga gagggccacc 60
atcaactgca agtccagtc gagtgtttta tacaggctca acaataagag ctacttagtt 120
tggtaccagc agaaactagg acagtctcct aagctgtctca tttactgggc atctaccogg 180
gaatccgggg tccctgaccg attcagtggc agcgggtctg ggacagattt cactctcacc 240
atcagcagcc tgcaggctga agatgtggca gtttattatt gtcaacaata ttatagtact 300
ccgtggacgt tcggccaagg gaccaagggt gaaatcaaac gaactgtggc tgcaccatct 360
gtcttcatct tcccgccatc tgatgagcag ttgaaatctg gaactgcctc tgttgtgtgc 420
ctgctgaata acttctatcc cagagaggcc aaagtacagt ggaagggtgga taacgccctc 480
ccaatcgggt a
491

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<210> 104
 <211> 163
 <212> PRT
 <213> Homosapien

<400> 104
 Asp Ile Val Met Thr Gln Ser Pro Asp Ser Leu Ala Val Ser Leu Gly
 1 5 10 15
 Glu Arg Ala Thr Ile Asn Cys Lys Ser Ser Gln Ser Val Leu Tyr Arg
 20 25 30
 Ser Asn Asn Lys Ser Tyr Leu Val Trp Tyr Gln Gln Lys Leu Gly Gln
 35 40 45
 Ser Pro Lys Leu Leu Ile Tyr Trp Ala Ser Thr Arg Glu Ser Gly Val
 50 55 60
 Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr
 65 70 75 80
 Ile Ser Ser Leu Gln Ala Glu Asp Val Ala Val Tyr Tyr Cys Gln Gln
 85 90 95
 Tyr Tyr Ser Thr Pro Trp Thr Phe Gly Gln Gly Thr Lys Val Glu Ile
 100 105 110
 Lys Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp
 115 120 125
 Glu Gln Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn Asn
 130 135 140
 Phe Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn Ala Leu
 145 150 155 160
 Pro Ile Gly

<210> 105
 <211> 499
 <212> DNA
 <213> Homosapien

<400> 105
 caggtccagc tggtagagtc tggggctgag gtgaagaagc ctggggcctc agtgaaggct 60
 tcctgcaagg tttccggata caccctcact gaattatcca tgcactgggt gcgacaggct 120
 cctggaaaag ggcttgagtg gatgggaggt tttgatcctg aagatgggtga aacaatctac 180
 gcacagaagt tccagggcag agtcaccatg accgaggaca catctacaga cacagcctac 240
 atggagctga gcagcctgag atctgaggac acggccgtgt attactgtgc aacagacgat 300
 ttttggagtg gttattttga ctactggggc cagggaaacc tggtcaccgt ctccctcagcc 360
 tccaccaagg gcccatcggc cttccccctg gcgccctgct ccaggagcac ctccgagagc 420
 acagcgcccc tgggctgcct ggtcaaggac tacttccccg aaccggtgac ggtgtcgtgg 480
 aactcaggcg ctctgacca 499

<210> 106
 <211> 166
 <212> PRT
 <213> Homosapien

<400> 106
 Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
 1 5 10 15
 Ser Val Lys Val Ser Cys Lys Val Ser Gly Tyr Thr Leu Thr Glu Leu
 20 25 30
 Ser Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Met

130
Phe Tyr Pro Arg Glu
145

135

140

<210> 109
<211> 540
<212> DNA
<213> Homosapien

<400> 109
caggtccagc tgggtacagtc tggggctgag gtgaagaagc ctggggcctc agtgaaggctc 60
tcctgcaagg ttcccgata caccctcact gaattatcca tgcactgggt gcgacaggct 120
cctggaaaag ggcttgagtg gatgggaggt ttgatcctg aagatgggtga aacaatctac 180
gcacagaagt tccagggcag agtcaccatg accgaggaca catctacaga cacagcctac 240
atggagctga gcagcctgag atctgaggac acggccgtgt attactgtgc aacggacgat 300
ttttggagtg gttattttga ctactggggc caggaaccc tggtcaccgt ctcctcagcc 360
tccaccaagg gcccatcggt cttccccctg gcgccctgct ccaggagcac ctccgagagc 420
acagcggccc tgggctgcct ggtcaaggac tacttccccg aaccggtgac ggtgtcgtgg 480
aactcaggcg ctctgaccag cggcgtgcac accttcccag ctgtcctaca gtcctcagga 540

<210> 110
<211> 180
<212> PRT
<213> Homosapien

<400> 110
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
1 5 10 15
Ser Val Lys Val Ser Cys Lys Val Ser Gly Tyr Thr Leu Thr Glu Leu
20 25 30
Ser Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Met
35 40 45
Gly Gly Phe Asp Pro Glu Asp Gly Glu Thr Ile Tyr Ala Gln Lys Phe
50 55 60
Gln Gly Arg Val Thr Met Thr Glu Asp Thr Ser Thr Asp Thr Ala Tyr
65 70 75 80
Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95
Ala Thr Asp Asp Phe Trp Ser Gly Tyr Phe Asp Tyr Trp Gly Gln Gly
100 105 110
Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val Phe
115 120 125
Pro Leu Ala Pro Cys Ser Arg Ser Thr Ser Glu Ser Thr Ala Ala Leu
130 135 140
Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val Ser Trp
145 150 155 160
Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala Val Leu
165 170 175
Gln Ser Ser Gly
180

<210> 111
<211> 478
<212> DNA

<213> Homosapien

<400> 111

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gacatcgtga tgaccagtc tccagactcc ctggctgtgt ctctgggcga gagggccacc 60
atcaactgca agtccagcca gagtgtttta tacagctcca acaataagaa ctacttagct 120
tggtaccagc agaaaccagg acagcctcct aagctgctca tttactggac atctaccgg 180
gaatccgggg tccctgaccg attcagtggc agcgggtctg tgacagattt cactctcacc 240
atcagcagcc tgcaggctga agatgtggca gtttattact gtcagcaata ttatagttct 300
ccgtggacgt tcggccaagg gaccaaggtg gaaatcaaac gaactgtggc tgcaccatct 360
gtcttcatct tcccgccatc tgatgagcag ttgaaatctg gaactgcctc tgttgtgtgc 420
ctgctgaata acttctatcc cagagaggcc aaagtacagt ggaaggtgga taacgcct 478
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<210> 112

<211> 159

<212> PRT

<213> Homosapien

<400> 112

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Asp Ile Val Met Thr Gln Ser Pro Asp Ser Leu Ala Val Ser Leu Gly
 1           5           10           15
Glu Arg Ala Thr Ile Asn Cys Lys Ser Ser Gln Ser Val Leu Tyr Ser
 20           25           30
Ser Asn Asn Lys Asn Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln
 35           40           45
Pro Pro Lys Leu Leu Ile Tyr Trp Thr Ser Thr Arg Glu Ser Gly Val
 50           55           60
Pro Asp Arg Phe Ser Gly Ser Gly Ser Val Thr Asp Phe Thr Leu Thr
 65           70           75           80
Ile Ser Ser Leu Gln Ala Glu Asp Val Ala Val Tyr Tyr Cys Gln Gln
 85           90           95
Tyr Tyr Ser Ser Pro Trp Thr Phe Gly Gln Gly Thr Lys Val Glu Ile
100           105           110
Lys Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp
115           120           125
Glu Gln Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn Asn
130           135           140
Phe Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn Ala
145           150           155
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<210> 113

<211> 542

<212> DNA

<213> Homosapien

<400> 113

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caggtccagc tggtagagtc tggggctgag gtgaagaagc ctggggcctc agtgaaggct 60
tcctgcaagg tttccggata caccctcagt gaattatcca tgcactgggt gcgacaggct 120
cctggaaaag ggcttgagtg gatgggaggt tttgatcctg aagatgggtga aacaatctac 180
gcacagaagt tccagggcag agtcaccatg accgaggaca catctacaga cacagcctac 240
atggagctga gcagcctgag atctgaggac acggccgtgt tttactgtgc aacaaagagg 300
gaatatagtg gctactttga ctactggggc cagggaaccc tggtcaccgt ctctcagcc 360
tccaccaagg gcccatcggt ctccccctg gcgcctgtct ccaggagcac ctccgagagc 420
acagcgcccc tgggctgcct ggtcaaggac tacttccccg aaccggtgac ggtgtcgtgg 480
aactcaggcg ctctgaccag cggcgtgcac accttcccag ctgtcctaca gtcctcagga 540
ct 542
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<210> 114
 <211> 180
 <212> PRT
 <213> Homosapien

<400> 114
 Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
 1 5 10 15
 Ser Val Lys Val Ser Cys Lys Val Ser Gly Tyr Thr Leu Ser Glu Leu
 20 25 30
 Ser Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Met
 35 40 45
 Gly Gly Phe Asp Pro Glu Asp Gly Glu Thr Ile Tyr Ala Gln Lys Phe
 50 55 60
 Gln Gly Arg Val Thr Met Thr Glu Asp Thr Ser Thr Asp Thr Ala Tyr
 65 70 75 80
 Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Phe Tyr Cys
 85 90 95
 Ala Thr Lys Arg Glu Tyr Ser Gly Tyr Phe Asp Tyr Trp Gly Gln Gly
 100 105 110
 Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val Phe
 115 120 125
 Pro Leu Ala Pro Cys Ser Arg Ser Thr Ser Glu Ser Thr Ala Ala Leu
 130 135 140
 Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val Ser Trp
 145 150 155 160
 Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala Val Leu
 165 170 175
 Gln Ser Ser Gly
 180

<210> 115
 <211> 477
 <212> DNA
 <213> Homosapien

<400> 115
 gacatcgtga tgaccacagtc tccagactcc ctggctgtgt ctctggggcga gagggccacc 60
 atcaactgca agtccagcca gagtggttta tacagctcca acagtaagaa ctacttagct 120
 tgggtccagc agaaaccagg acagcctcct aagctgctca tttactgggc atctacccgg 180
 gaatccgggg tccctgaccg attcagtggc agcgggtctg ggacagattt cactctcacc 240
 atcagccgcc tgcaggctga agatgtggca gtttattcct gtcagcaata ttttattact 300
 ccgtggacgt tcggccaagg gaccaaggtg gaactcaaac gaactgtggc tgcaccatct 360
 gtcttcatct tcccgccatc tgatgagcag ttgaaatctg gaactgcctc tgttgtgtgc 420
 ctgctgaata acttctatcc cagagaggcc aaagtacagt ggaaggtgga taacgcc 477

<210> 116
 <211> 159
 <212> PRT
 <213> Homosapien

<400> 116
 Asp Ile Val Met Thr Gln Ser Pro Asp Ser Leu Ala Val Ser Leu Gly
 1 5 10 15
 Glu Arg Ala Thr Ile Asn Cys Lys Ser Ser Gln Ser Val Leu Tyr Ser
 20 25 30

Ser	Asn	Ser	Lys	Asn	Tyr	Leu	Ala	Trp	Phe	Gln	Gln	Lys	Pro	Gly	Gln
	35						40					45			
Pro	Pro	Lys	Leu	Leu	Ile	Tyr	Trp	Ala	Ser	Thr	Arg	Glu	Ser	Gly	Val
	50					55					60				
Pro	Asp	Arg	Phe	Ser	Gly	Ser	Gly	Ser	Gly	Thr	Asp	Phe	Thr	Leu	Thr
65					70					75				80	
Ile	Ser	Arg	Leu	Gln	Ala	Glu	Asp	Val	Ala	Val	Tyr	Ser	Cys	Gln	Gln
			85						90					95	
Tyr	Phe	Ile	Thr	Pro	Trp	Thr	Phe	Gly	Gln	Gly	Thr	Lys	Val	Glu	Leu
			100					105					110		
Lys	Arg	Thr	Val	Ala	Ala	Pro	Ser	Val	Phe	Ile	Phe	Pro	Pro	Ser	Asp
		115					120					125			
Glu	Gln	Leu	Lys	Ser	Gly	Thr	Ala	Ser	Val	Val	Cys	Leu	Leu	Asn	Asn
	130					135					140				
Phe	Tyr	Pro	Arg	Glu	Ala	Lys	Val	Gln	Trp	Lys	Val	Asp	Asn	Ala	
145					150					155					

<210> 117
 <211> 459
 <212> DNA
 <213> Homosapien

<400> 117
 caggtgcagc ctgagcagtc ggggtccagga ctggtgaagc cctcgcagac cctctcactc 60
 acctgtgcc tctccgggga cagtgtctct agcaacagtg ctgcttggaa ctggatcagg 120
 cagtccccct cgagaggcct tgagtggctg ggaaggacat actacaggtc caagtggat 180
 agtgatcatg cagtatctgt gagaagtcca ataaccatct acccagacac atccaagaac 240
 cagttctccc tgcagctgaa ctctgtgact cccgaggaca cggctgtgta ttactgtgca 300
 agagatcgga ttagtgggac ctatgtcggt atggacgtct ggggccaagg gaccacgggc 360
 accgtctcct cagcctccac caagggccca tcggtcttcc cctggcgcc cctgctccag 420
 gagcacctcc gagagcacag cggccctggg ctgcctggc 459

<210> 118
 <211> 153
 <212> PRT
 <213> Homosapien

Gln	Val	Gln	Pro	Glu	Gln	Ser	Gly	Pro	Gly	Leu	Val	Lys	Pro	Ser	Gln
1				5					10					15	
Thr	Leu	Ser	Leu	Thr	Cys	Ala	Ile	Ser	Gly	Asp	Ser	Val	Ser	Ser	Asn
			20					25					30		
Ser	Ala	Ala	Trp	Asn	Trp	Ile	Arg	Gln	Ser	Pro	Ser	Arg	Gly	Leu	Glu
		35					40					45			
Trp	Leu	Gly	Arg	Thr	Tyr	Tyr	Arg	Ser	Lys	Trp	Tyr	Ser	Asp	His	Ala
	50					55				60					
Val	Ser	Val	Arg	Ser	Arg	Ile	Thr	Ile	Tyr	Pro	Asp	Thr	Ser	Lys	Asn
65					70					75				80	
Gln	Phe	Ser	Leu	Gln	Leu	Asn	Ser	Val	Thr	Pro	Glu	Asp	Thr	Ala	Val
				85					90					95	
Tyr	Tyr	Cys	Ala	Arg	Asp	Arg	Ile	Ser	Gly	Thr	Tyr	Val	Gly	Met	Asp
			100					105					110		
Val	Trp	Gly	Gln	Gly	Thr	Thr	Val	Thr	Val	Ser	Ser	Ala	Ser	Thr	Lys
		115					120					125			
Gly	Pro	Ser	Val	Phe	Pro	Leu	Ala	Pro	Leu	Leu	Gln	Glu	His	Leu	Arg
	130					135					140				

Glu His Ser Gly Pro Gly Leu Pro Gly
145 150

<210> 119
<211> 526
<212> DNA
<213> Homosapien

<400> 119
ccagctcagc tcctggggct gctaattgtc tgggtccctg gatccaatga ggatattgtg 60
atgacccaga ctccactctc cctgcccgtc acccctggag agccggcctc catctcctgc 120
aggtctagtc agagcctctt ggatagtgat gatggaaaca cctatttgga ctggtacctg 180
cagaagccag ggcagtctcc acagctcctg atctatacgc ttccctttcg ggcctctgga 240
gtcccagaca gggttcagtgg cagtgggtca ggcactgatt tcacactgac aatcagcagg 300
gtggaggctg aggatgttgg agtttattac tgcattgcaac gtatagagtt tcctctcact 360
ttcggcggag ggaccaagggt ggagatcaaa cgaactgtgg ctgcaccatc tgtcttcac 420
ttcccgccat ctgatgagca gttgaaatct ggaactgcct ctgttggtgtg cctgctgaat 480
aacttctatc ccagagaggc caaagtacag tggaagggtg ataacg 526

<210> 120
<211> 175
<212> PRT
<213> Homosapien

<400> 120
Pro Ala Gln Leu Leu Gly Leu Leu Met Leu Trp Val Pro Gly Ser Asn
1 5 10 15
Glu Asp Ile Val Met Thr Gln Thr Pro Leu Ser Leu Pro Val Thr Pro
20 25 30
Gly Glu Pro Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Leu Leu Asp
35 40 45
Ser Asp Asp Gly Asn Thr Tyr Leu Asp Trp Tyr Leu Gln Lys Pro Gly
50 55 60
Gln Ser Pro Gln Leu Leu Ile Tyr Thr Leu Ser Phe Arg Ala Ser Gly
65 70 75 80
Val Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu
85 90 95
Thr Ile Ser Arg Val Glu Ala Glu Asp Val Gly Val Tyr Tyr Cys Met
100 105 110
Gln Arg Ile Glu Phe Pro Leu Thr Phe Gly Gly Gly Thr Lys Val Glu
115 120 125
Ile Lys Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser
130 135 140
Asp Glu Gln Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn
145 150 155 160
Asn Phe Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn
165 170 175

<210> 121
<211> 499
<212> DNA
<213> Homosapien

<400> 121
caggtccagg tgggtacagtc tggggctgag gtgaagaacc ctggggcctc agtgaaggctc 60


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tctctgcaagg tttccggatc caccctcact gaattatcca tgcactgggt gcgacaggct 120
cctggaaaag ggcttgagt gatgggaggt tttgatcctg aagatgggtga aacaatctac 180
gcacagaagt tccagggcag agtcaccatg accgaggaca catctacaga cacagtctac 240
atggagctga gcagcctgag atctgaggac acggccgtgt attactgtgc aaccaacgat 300
ttttggagtg gttattttga ctactggggc cagggaaacc tggtcaccgt ctccctcagcc 360
tccaccaagg gcccatcggg cttccccctg gcgccctgct ccaggagcac ctccgagagc 420
acagcggccc tgggctgcct ggtcaaggac tacttccccg aaccgggtgac ggtgtcgtgg 480
aactcaggcg ctctgacca 499

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<210> 122

<211> 166

<212> PRT

<213> Homosapien

<400> 122

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Gln Val Gln Val Val Gln Ser Gly Ala Glu Val Lys Asn Pro Gly Ala
 1           5           10           15
Ser Val Lys Val Ser Cys Lys Val Ser Gly Ser Thr Leu Thr Glu Leu
      20           25           30
Ser Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Met
      35           40           45
Gly Gly Phe Asp Pro Glu Asp Gly Glu Thr Ile Tyr Ala Gln Lys Phe
 50           55           60
Gln Gly Arg Val Thr Met Thr Glu Asp Thr Ser Thr Asp Thr Val Tyr
65           70           75           80
Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
      85           90           95
Ala Thr Asn Asp Phe Trp Ser Gly Tyr Phe Asp Tyr Trp Gly Gln Gly
      100          105          110
Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val Phe
      115          120          125
Pro Leu Ala Pro Cys Ser Arg Ser Thr Ser Glu Ser Thr Ala Ala Leu
      130          135          140
Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val Ser Trp
145          150          155          160
Asn Ser Gly Ala Leu Thr
      165

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<210> 123

<211> 536

<212> DNA

<213> Homosapien

<400> 123

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caggctttca tttctctgtt gctctggatc tctgatgtct atggggacat cgtgatgacc 60
cagctccag actccctggc tgtgtctctg ggcgagaggg ccaccatcac ctgcaagtcc 120
agccagactg ttttatacag ctccaacaat aagaactact tagtttggtg tcagcagaaa 180
tcaggacagc ctccctaagct gctcattcac tgggcatcta tccgggaatc cgggggccct 240
gaccgattca gtggcagcgg gtctgggaca gatttcacgc tcaccatcag cagcctgcag 300
gctgaagatg tggcagttta ttactgtcag caatattata gtagtccgtg gacgttcggc 360
caagggacca aggtggaaat caaacgaact gtggctgcac catctgtctt catcttccc 420
ccatctgatg agcagttgaa atctggaact gcctctgttg tgtgcctgct gaataacttc 480
tatcccagag aggccaaagt acagtggaag gtggataacg cccttccaat cgggta 536

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<210> 124

<211> 178

<212> PRT
 <213> Homosapien

<400> 124
 Gln Val Phe Ile Ser Leu Leu Leu Trp Ile Ser Asp Val Tyr Gly Asp
 1 5 10 15
 Ile Val Met Thr Gln Ser Pro Asp Ser Leu Ala Val Ser Leu Gly Glu
 20 25 30
 Arg Ala Thr Ile Thr Cys Lys Ser Gln Thr Val Leu Tyr Ser Ser
 35 40 45
 Asn Asn Lys Asn Tyr Leu Val Trp Tyr Gln Gln Lys Ser Gly Gln Pro
 50 55 60
 Pro Lys Leu Leu Ile His Trp Ala Ser Ile Arg Glu Ser Gly Val Pro
 65 70 75 80
 Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile
 85 90 95
 Ser Ser Leu Gln Ala Glu Asp Val Ala Val Tyr Tyr Cys Gln Gln Tyr
 100 105 110
 Tyr Ser Ser Pro Trp Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
 115 120 125
 Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu
 130 135 140
 Gln Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe
 145 150 155 160
 Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn Ala Leu Pro
 165 170 175
 Ile Gly

<210> 125
 <211> 414
 <212> DNA
 <213> Homosapien

<400> 125
 caggtgcagg ctgagcagtc ggggtccagga ctgggtgaagc cctcgcagac cctctcactc 60
 acctgtgcca tctccgggga cagtgtctct agctacagtg ctgcttggaa ctggatcagg 120
 cagtccccctt cgagaggcct tgagtggctg ggaaggacat actacaggtc caagtgggtat 180
 agtgatcatg cagtatctgt gagaagtcga ataaccatct acccagacac atccaagaac 240
 cagttctccc tgcagctgaa ctctgtgact cccgaggaca cggtgtgta ttactgtgca 300
 agagatcgga ttagtgggac ctatgtcggg atggacgtct ggggccaaagg gaccacgggtc 360
 accgtctcct cagcctccac caagggccccc atcgggtcttc cccctggccc cctc 414

<210> 126
 <211> 138
 <212> PRT
 <213> Homosapien

<400> 126
 Gln Val Gln Ala Glu Gln Ser Gly Pro Gly Leu Val Lys Pro Ser Gln
 1 5 10 15
 Thr Leu Ser Leu Thr Cys Ala Ile Ser Gly Asp Ser Val Ser Ser Tyr
 20 25 30
 Ser Ala Ala Trp Asn Trp Ile Arg Gln Ser Pro Ser Arg Gly Leu Glu
 35 40 45
 Trp Leu Gly Arg Thr Tyr Tyr Arg Ser Lys Trp Tyr Ser Asp His Ala

50		55		60	
Val	Ser	Val	Arg	Ser	Arg
65		70		75	
Gln	Phe	Ser	Leu	Gln	Leu
		85		90	
Tyr	Tyr	Cys	Ala	Arg	Asp
		100		105	
Val	Trp	Gly	Gln	Gly	Thr
		115		120	
Gly	Pro	Ile	Gly	Leu	Pro
130		135			

<210> 127
 <211> 514
 <212> DNA
 <213> Homosapien

<400> 127
 gtcttcattt ctctgttgct ctggatctct ggtgcctacg gggacatcgt gatgacccag 60
 tctccagact ccctggctgt gtctctgggc gagagggcca ccatcaactg caagtccagc 120
 cagagtgttt tatacagttc caacaataag aactacatag tttggtacca gcagaaacca 180
 gggcagcctc ctaagttgct catttactgg acatctaccc ggggaatccgg ggtccctgac 240
 cgattcagtg gcagcggggtc tggaacagat ttcactctca ctatcagtag cctgcaggct 300
 gaagatgtgg cagtttatta ctgtcagcaa tatttttagtt ctccgtggac gttcggccaa 360
 gggaccaaag tggacatcaa acgaactgtg gctgcacccat ctgtcttcat cttcccgcca 420
 tctgatgagc agttgaaatc tggaactgcc tctgttggtg gcctgctgaa taacttctat 480
 cccagagagg ccaaagtaca gtggaaggtg gata 514

<210> 128
 <211> 171
 <212> PRT
 <213> Homosapien

<400> 128
 Val Phe Ile Ser Leu Leu Leu Trp Ile Ser Gly Ala Tyr Gly Asp Ile
 1 5 10 15
 Val Met Thr Gln Ser Pro Asp Ser Leu Ala Val Ser Leu Gly Glu Arg
 20 25 30
 Ala Thr Ile Asn Cys Lys Ser Ser Gln Ser Val Leu Tyr Ser Ser Asn
 35 40 45
 Asn Lys Asn Tyr Ile Val Trp Tyr Gln Gln Lys Pro Gly Gln Pro Pro
 50 55 60
 Lys Leu Leu Ile Tyr Trp Thr Ser Thr Arg Glu Ser Gly Val Pro Asp
 65 70 75 80
 Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser
 85 90 95
 Ser Leu Gln Ala Glu Asp Val Ala Val Tyr Tyr Cys Gln Gln Tyr Phe
 100 105 110
 Ser Ser Pro Trp Thr Phe Gly Gln Gly Thr Lys Val Asp Ile Lys Arg
 115 120 125
 Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln
 130 135 140
 Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr
 145 150 155 160
 Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp
 165 170

<210> 129
 <211> 444
 <212> DNA
 <213> Homosapien

<400> 129
 cagtcgggtc caggactggt gaagccctcg cagaccctct cactcacctg tgccatctcc 60
 ggggacagtg tctctagcaa cagtgctgct tggaactgga tcaggcagtc cccttcgaga 120
 ggcccttgagt ggctgggaag gacatactac aggtccaagt ggtatagtga tcatgcagta 180
 tctgtgagaa gtcgaataac catctacca gacacatcca agaaccagtt ctccctgcag 240
 ctgaactctg tgactcccga ggacacggct gtgtattact gtgcaagaga tcggattagt 300
 gggacctatg tcggtatgga cgtctggggc caagggacca cggtcaccgt ctctcagcc 360
 tccaccaagg gcccatcggt cttccccctg gcgcccctgc tccaggagca cctccgagag 420
 cacagcggcc ctgggctgcc tggc 444

<210> 130
 <211> 148
 <212> PRT
 <213> Homosapien

<400> 130
 Gln Ser Gly Pro Gly Leu Val Lys Pro Ser Gln Thr Leu Ser Leu Thr
 1 5 10 15
 Cys Ala Ile Ser Gly Asp Ser Val Ser Ser Asn Ser Ala Ala Trp Asn
 20 25 30
 Trp Ile Arg Gln Ser Pro Ser Arg Gly Leu Glu Trp Leu Gly Arg Thr
 35 40 45
 Tyr Tyr Arg Ser Lys Trp Tyr Ser Asp His Ala Val Ser Val Arg Ser
 50 55 60
 Arg Ile Thr Ile Tyr Pro Asp Thr Ser Lys Asn Gln Phe Ser Leu Gln
 65 70 75 80
 Leu Asn Ser Val Thr Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
 85 90 95
 Asp Arg Ile Ser Gly Thr Tyr Val Gly Met Asp Val Trp Gly Gln Gly
 100 105 110
 Thr Thr Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val Phe
 115 120 125
 Pro Leu Ala Pro Leu Leu Gln Glu His Leu Arg Glu His Ser Gly Pro
 130 135 140
 Gly Leu Pro Gly
 145

<210> 131
 <211> 505
 <212> DNA
 <213> Homosapien

<400> 131
 gggtgctaa tgctctggat acctggatcc agtgcagata ttgggatgac ccagactcca 60
 ctctctctgt ccgtcaccctc tggacagccg gcctccatct cctgtaagtc tagtcagagc 120
 ctctgtata gtgatggaaa gacctatttg tattggtacc tgcagaagcc aggccagcct 180
 ccacaacacc tgatctatga agtttccaac cggttctctg gagtgccaga taggttcagt 240
 ggcagcgggt ctgggacaga tttcacactg aaaatcagcc ggggtggaggc tgatgatgtt 300
 ggggtttatt actgcatgca aactatacac cttccgctca ctttcggcgg agggaccaag 360

gtggagatcc aacgaactgt ggctgcacca tctgtcttca tcttcccgcc atctgatgag 420
 cagttgaaat ctggaactgc ctctgttggtg tgctgtctga ataacttcta tcccagagag 480
 gccaaagtac agtgaaggt ggata 505

<210> 132
 <211> 168
 <212> PRT
 <213> Homosapien

<400> 132
 Gly Leu Leu Met Leu Trp Ile Pro Gly Ser Ser Ala Asp Ile Gly Met
 1 5 10 15
 Thr Gln Thr Pro Leu Ser Leu Ser Val Thr Pro Gly Gln Pro Ala Ser
 20 25 30
 Ile Ser Cys Lys Ser Ser Gln Ser Leu Leu Tyr Ser Asp Gly Lys Thr
 35 40 45
 Tyr Leu Tyr Trp Tyr Leu Gln Lys Pro Gly Gln Pro Pro Gln His Leu
 50 55 60
 Ile Tyr Glu Val Ser Asn Arg Phe Ser Gly Val Pro Asp Arg Phe Ser
 65 70 75 80
 Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Lys Ile Ser Arg Val Glu
 85 90 95
 Ala Asp Asp Val Gly Val Tyr Tyr Cys Met Gln Thr Ile His Leu Pro
 100 105 110
 Leu Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Gln Arg Thr Val Ala
 115 120 125
 Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser
 130 135 140
 Gly Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr Pro Arg Glu
 145 150 155 160
 Ala Lys Val Gln Trp Lys Val Asp
 165

<210> 133
 <211> 447
 <212> DNA
 <213> Homosapien

<400> 133
 gagcagtcgg gtccaggact ggtgaagccc tcgcagaccc tctcactcac ctgtgccatc 60
 tccggggaca gtgtctctag caacagtgtc gcttggaaact ggatcaggca gtccccttcg 120
 agaggccttg agtggctggg aaggacatac tacagggtcca agtgggtatag tgatcatgca 180
 gtatctgtga gaagtcgaat aaccatctac ccagacacat ccaagaacca gttctccctg 240
 cagctgaact ctgtgactcc cgaggacacg gctgtgtatt actgtgcaag agatcggatt 300
 agtgggacct atgtcgggtat ggacgtctgg ggccaaggga ccacggtcac cgtctcctca 360
 gcctccacca agggcccatc ggtcttcccc ctggcgcccc tgctccagga gcacctccga 420
 gagcacagcg gccctgggct gcctggc 447

<210> 134
 <211> 149
 <212> PRT
 <213> Homosapien

<400> 134
 Glu Gln Ser Gly Pro Gly Leu Val Lys Pro Ser Gln Thr Leu Ser Leu
 1 5 10 15

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Thr Cys Ala Ile Ser Gly Asp Ser Val Ser Ser Asn Ser Ala Ala Trp
      20      25      30
Asn Trp Ile Arg Gln Ser Pro Ser Arg Gly Leu Glu Trp Leu Gly Arg
      35      40      45
Thr Tyr Tyr Arg Ser Lys Trp Tyr Ser Asp His Ala Val Ser Val Arg
      50      55      60
Ser Arg Ile Thr Ile Tyr Pro Asp Thr Ser Lys Asn Gln Phe Ser Leu
      65      70      75      80
Gln Leu Asn Ser Val Thr Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala
      85      90      95
Arg Asp Arg Ile Ser Gly Thr Tyr Val Gly Met Asp Val Trp Gly Gln
      100      105      110
Gly Thr Thr Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val
      115      120      125
Phe Pro Leu Ala Pro Leu Leu Gln Glu His Leu Arg Glu His Ser Gly
      130      135      140
Pro Gly Leu Pro Gly
145

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<210> 135
<211> 520
<212> DNA
<213> Homosapien

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<400> 135
caggtcttca tttctctggt gctctggatc tctggtgcoct acggggacat cgtgatgacc 60
cagtctccag actccctggc tgtgtctctg ggcgagaggg ccgccatcaa ctgcaagtcc 120
agccagactg ttttatacag ctccaacaat aagaactact tggtttggtgta ccagcagaaa 180
ccaggacagc ctcccaagct gctcatttac tgggcatcta cccgggaatc cgggggtccct 240
gaccgattca gtggcagcgg gtctgggaca gatttcactc tcaccatcag cagcctgcag 300
gctgaagatg tggcagttta ttactgtcaa caatattata aaagtccgtg gacgttcggc 360
caagggacca aggtggaaat caaacgaact gtggctgcac catctgtctt catcttcccg 420
ccatctgatg agcagttgaa atctggaact gcctctgttg tgtgcctgct gaataacttc 480
tatcccagag aggccaaagt acagtggaag gtggataacg 520

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<210> 136
<211> 173
<212> PRT
<213> Homosapien

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<400> 136
Gln Val Phe Ile Ser Leu Leu Leu Trp Ile Ser Gly Ala Tyr Gly Asp
 1      5      10      15
Ile Val Met Thr Gln Ser Pro Asp Ser Leu Ala Val Ser Leu Gly Glu
      20      25      30
Arg Ala Ala Ile Asn Cys Lys Ser Ser Gln Thr Val Leu Tyr Ser Ser
      35      40      45
Asn Asn Lys Asn Tyr Leu Val Trp Tyr Gln Gln Lys Pro Gly Gln Pro
      50      55      60
Pro Lys Leu Leu Ile Tyr Trp Ala Ser Thr Arg Glu Ser Gly Val Pro
      65      70      75      80
Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile
      85      90      95
Ser Ser Leu Gln Ala Glu Asp Val Ala Val Tyr Tyr Cys Gln Gln Tyr
      100      105      110
Tyr Lys Ser Pro Trp Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys

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<212> DNA
 <213> Homosapien

<400> 139
 agacccagggt cttcattttct ctggttgctct ggatctctgg tgcctacggg gacatcgtga 60
 tgacccagtc tccagactcc ctggctgtgt ctctgggcca gagggccacc atcaactgca 120
 agtccagcca gagtatttta tacagctcca ataataagaa ttatttagtt tggtagaccagc 180
 agaaaccagg acagcctcct aagttgctca tttactgggc atctaccggg gaatccgggg 240
 tccctgaccg attcagtggc agcgggtctg ggacagattt cactctcacc atcagcagcc 300
 tgcaggctga agatgtggca gtttattact gtcagcaata ttatagtagt cctccgacgt 360
 tcggccaagg gaccaagggtg gaaatcaaac gaactgtggc tgcaccatct gtcttcatct 420
 tcccgccatc tgatgagcag ttgaaatctg gaactgcctc tgttgtgtgc ctgctgaata 480
 acttctatcc cagagaggcc aaagtacagt ggaagggtga taacgcctc caatcgggta 540

<210> 140
 <211> 179
 <212> PRT
 <213> Homosapien

<400> 140
 Thr Gln Val Phe Ile Ser Leu Leu Leu Trp Ile Ser Gly Ala Tyr Gly
 1 5 10 15
 Asp Ile Val Met Thr Gln Ser Pro Asp Ser Leu Ala Val Ser Leu Gly
 20 25 30
 Glu Arg Ala Thr Ile Asn Cys Lys Ser Ser Gln Ser Ile Leu Tyr Ser
 35 40 45
 Ser Asn Asn Lys Asn Tyr Leu Val Trp Tyr Gln Gln Lys Pro Gly Gln
 50 55 60
 Pro Pro Lys Leu Leu Ile Tyr Trp Ala Ser Thr Arg Glu Ser Gly Val
 65 70 75 80
 Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr
 85 90 95
 Ile Ser Ser Leu Gln Ala Glu Asp Val Ala Val Tyr Tyr Cys Gln Gln
 100 105 110
 Tyr Tyr Ser Ser Pro Pro Thr Phe Gly Gln Gly Thr Lys Val Glu Ile
 115 120 125
 Lys Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp
 130 135 140
 Glu Gln Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn Asn
 145 150 155 160
 Phe Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn Ala Leu
 165 170 175
 Gln Ser Gly

<210> 141
 <211> 518
 <212> DNA
 <213> Homosapien

<400> 141
 accatggagt ggacctggag ggtcctcttc ttggtggcag cagctacagg caccacgcc 60
 caggtccagc tggtagagtc tggggctgag gtgaagaagc ctggggcctc agtgaaggct 120
 tcctgcaagg tttccggata caccctcact gaattatcca tgcactgggt gcgacaggct 180
 cctggaaaag ggcttgagtg gatgggaggt tttgatcctg aagatggtga aacaatctac 240


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gcacagaagt tccagggcag agtcaccatg accgaggaca catctacaga cacagcctac 300
atggagctga gtagcctgag aactgaggac acggccgtgt attactgtac aacggacgat 360
ttttggagtg gttattttga ctactggggc cagggaaacc tggtcaccgt ctctcagacc 420
tccaccaagg gcccatcggt cttccccctg gcgccctgct ccaggagcac ctccgagagc 480
acagcggcct gggctgcctg gtcaaggact acttcccc 518

```

<210> 142
 <211> 172
 <212> PRT
 <213> Homosapien

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<400> 142
Thr Met Glu Trp Thr Trp Arg Val Leu Phe Leu Val Ala Ala Ala Thr
1      5      10      15
Gly Thr His Ala Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys
20     25     30
Lys Pro Gly Ala Ser Val Lys Val Ser Cys Lys Val Ser Gly Tyr Thr
35     40     45
Leu Thr Glu Leu Ser Met His Trp Val Arg Gln Ala Pro Gly Lys Gly
50     55     60
Leu Glu Trp Met Gly Gly Phe Asp Pro Glu Asp Gly Glu Thr Ile Tyr
65     70     75     80
Ala Gln Lys Phe Gln Gly Arg Val Thr Met Thr Glu Asp Thr Ser Thr
85     90     95
Asp Thr Ala Tyr Met Glu Leu Ser Ser Leu Arg Thr Glu Asp Thr Ala
100    105    110
Val Tyr Tyr Cys Thr Thr Asp Asp Phe Trp Ser Gly Tyr Phe Asp Tyr
115    120    125
Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly
130    135    140
Pro Ser Val Phe Pro Leu Ala Pro Cys Ser Arg Ser Thr Ser Glu Ser
145    150    155    160
Thr Ala Ala Trp Ala Ala Trp Ser Arg Thr Thr Ser
165    170

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<210> 143
 <211> 519
 <212> DNA
 <213> Homosapien

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<400> 143
caggtcttca tttctctgtt gctctggatc tctggtgcct acggggacat cgtgatgacc 60
cagtctccag actccctggc tgtgtctctg ggcgagaggg ccaccatcaa ctgcaagtcc 120
agccagagtc ttttatacag ctccaaaaat aagaactatt tagtttggtg ccagcagaaa 180
ccaggacagc ctccaaagct gctcattaac tgggcatcta cccgggaatc cggggtccct 240
gaccgattca gtggcagcgg gtctgggaca gatttcactc tcaccatcag cagcctgcag 300
gctgaagatg tggcagttta ttactgtcag caatattata gttctccgtg gacgttcggc 360
caagggacca aggtggaaat caaacgaact gtggctgcac catctgtctt catcttcccc 420
ccatctgatg agcagttgaa atctggaact gcctctgttg tgtgcctgct gaataacttc 480
tatcccagag aggcaaagta cagtggaagg tggatacgc 519

```

<210> 144
 <211> 173
 <212> PRT
 <213> Homosapien

<400> 144
 Gln Val Phe Ile Ser Leu Leu Leu Trp Ile Ser Gly Ala Tyr Gly Asp
 1 5 10 15
 Ile Val Met Thr Gln Ser Pro Asp Ser Leu Ala Val Ser Leu Gly Glu
 20 25 30
 Arg Ala Thr Ile Asn Cys Lys Ser Ser Gln Ser Leu Leu Tyr Ser Ser
 35 40 45
 Lys Asn Lys Asn Tyr Leu Val Trp Tyr Gln Gln Lys Pro Gly Gln Pro
 50 55 60
 Pro Lys Leu Leu Ile Asn Trp Ala Ser Thr Arg Glu Ser Gly Val Pro
 65 70 75 80
 Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile
 85 90 95
 Ser Ser Leu Gln Ala Glu Asp Val Ala Val Tyr Tyr Cys Gln Gln Tyr
 100 105 110
 Tyr Ser Ser Pro Trp Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
 115 120 125
 Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu
 130 135 140
 Gln Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe
 145 150 155 160
 Tyr Pro Arg Glu Ala Lys Tyr Ser Gly Arg Trp Ile Arg
 165 170

<210> 145
 <211> 436
 <212> DNA
 <213> Homosapien

<400> 145
 gagcagtcgg ggggaggcgt ggtccagcct gggagggtccc tgagactctc ctgtgcagcg 60
 tctggattca ccttcagtag ctatggcatg cactgggtcc gccaggctcc aggcaagggg 120
 ctggagtggg tggcagttat atggtatgat ggaaataata aatactatgc agactccgtg 180
 aagggccgat tcaccatctc cagagacact tccaagaaca cgctgtatct gcaaatgaac 240
 agcctgagag ccgaggacac ggctgtgtat tactgtgcga gagatagcag ctctgtactac 300
 tactacggta tggacgtctg gggccaaggg accacgggtca ccgtctcctc agcctccacc 360
 aaggggcccat cgggtcttccc cctggcgccc tgctccagga gcacctccga gagcacagcg 420
 gccctgggct gcctgg 436

<210> 146
 <211> 145
 <212> PRT
 <213> Homosapien

<400> 146
 Glu Gln Ser Gly Gly Gly Val Val Gln Pro Gly Arg Ser Leu Arg Leu
 1 5 10 15
 Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr Gly Met His Trp
 20 25 30
 Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val Ala Val Ile Trp
 35 40 45
 Tyr Asp Gly Asn Asn Lys Tyr Tyr Ala Asp Ser Val Lys Gly Arg Phe
 50 55 60
 Thr Ile Ser Arg Asp Thr Ser Lys Asn Thr Leu Tyr Leu Gln Met Asn
 65 70 75 80
 Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg Asp Ser

[illegible]

<400> 147							
gctccgctac	ttctcaccct	cctcgctcac	tgcacaggtt	cttgggccaa	ttttatgctg	60	
actcagcccc	actctgtgtc	ggagtctccg	gggaagacgg	taaccatctc	ctgcaccgcg	120	
agcagtggca	gcattgccag	caactatgtg	cagtggttcc	agcagcgccc	gggcagttcc	180	
ccaccactg	taatctatga	ggatgaccaa	agaccctctg	gggtccctga	tcggttctgt	240	
ggctccatcg	acagctcctc	caactctgcc	tccctacca	tctctggact	gaggactgag	300	
gacgaggctg	actactactg	tcagtcttat	gatagcagca	atcatgtggt	attcggcgga	360	
gggaccaagc	tgaccgtcct	aggtcagccc	aaggctgcc	cctcggtcac	tctgttcccg	420	
ccctcctc						428	

<400> 148																
Ala	Pro	Leu	Leu	Leu	Thr	Leu	Leu	Ala	His	Cys	Thr	Gly	Ser	Trp	Ala	
1				5					10					15		
Asn	Phe	Met	Leu	Thr	Gln	Pro	His	Ser	Val	Ser	Glu	Ser	Pro	Gly	Lys	
			20					25					30			
Thr	Val	Thr	Ile	Ser	Cys	Thr	Arg	Ser	Ser	Gly	Ser	Ile	Ala	Ser	Asn	
			35				40					45				
Tyr	Val	Gln	Trp	Phe	Gln	Gln	Arg	Pro	Gly	Ser	Ser	Pro	Thr	Thr	Val	
	50					55					60					
Ile	Tyr	Glu	Asp	Asp	Gln	Arg	Pro	Ser	Gly	Val	Pro	Asp	Arg	Phe	Cys	
65					70					75				80		
Gly	Ser	Ile	Asp	Ser	Ser	Ser	Asn	Ser	Ala	Ser	Leu	Thr	Ile	Ser	Gly	
				85					90					95		
Leu	Arg	Thr	Glu	Asp	Glu	Ala	Asp	Tyr	Tyr	Cys	Gln	Ser	Tyr	Asp	Ser	
			100					105					110			
Ser	Asn	His	Val	Val	Phe	Gly	Gly	Gly	Thr	Lys	Leu	Thr	Val	Leu	Gly	
			115				120					125				
Gln	Pro	Lys	Ala	Ala	Pro	Ser	Val	Thr	Leu	Phe	Pro	Pro	Ser			
			130			135					140					

<400> 149

Gln Pro Asp Ala Ile Asn Ala Pro Val Thr Cys Cys Tyr Asn Phe Thr
1 5 10 15
Asn Arg Lys Ile Ser Val Gln Arg Leu Ala Ser Tyr Arg Arg Ile Thr
20 25 30
Ser Ser Lys Cys Pro Lys Glu Ala Val Ile Phe Lys Thr Ile Val Ala
35 40 45
Lys Glu Ile Cys Ala Asp Pro Lys Gln Lys Trp Val Gln Asp Ser Met
50 55 60
Asp His Leu Asp Lys Gln Thr Gln Thr Pro Lys Thr
65 70 75

<210> 150

<211> 16

<212> PRT

<213> Homosapien

<400> 150

Ile Ser Val Gln Arg Leu Ala Ser Tyr Arg Arg Ile Thr Ser Ser Lys
1 5 10 15